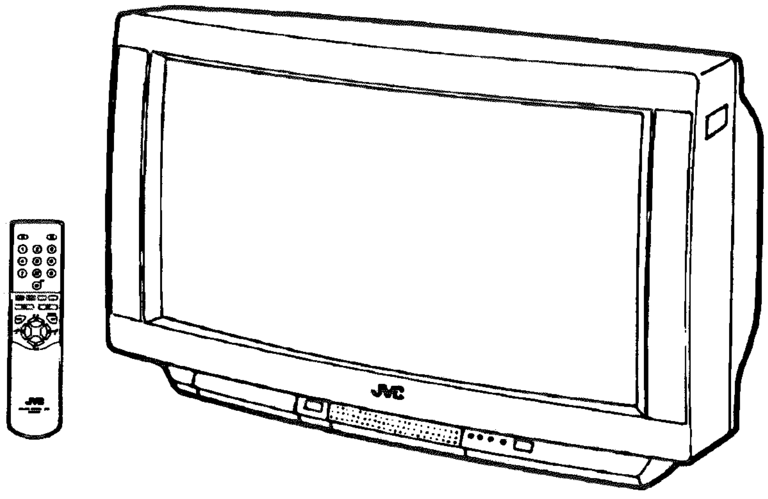
JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
MC

AV-32WH3EP
AV-28WH3EP



CONTENTS

- ■ SPECIFICATIONS ········· 2
- ★ OPERATING INSTRACTIONS (APPENDED) ········· 1-1
- ■ SAFETY PRECAUTIONS ········· 3
- ■ FEATURES / MAIN DIFFERENCE PARTS LIST ········· 4
- ■ SPECIFIC SERVICE INSTRUCTIONS ········· 6
- ■ SERVICE ADJUSTMENTS ········· 12
- ★ STANDARD CIRCUIT DIAGRAM (APPENDED) ········· 2-1
- ■ PARTS LIST ········· 31

COPYRIGHT © 1998 VICTOR COMPANY OF JAPAN, LTD.

No.51379
May. 1998

SPECIFICATIONS

Item	Content	
	AV-32WH3EP	AV-28WH3EP
Dimensions (W × H × D)	80.5mm × 55.0mm × 55.0mm	71.6mm × 48.9mm × 49.6mm
Mass	48.2kg	34.7kg
TV RF System	CCIR (L, B/G, I)	
Colour System	PAL / SECAM / NTSC (Only EXT mode)	
Stereo System	A2/NICAM (B/G, L)	
Teletext System	Fastext(United Kingdom system) / TOP (German system) / WST(Standard system)	
Receiving Frequency		
VHF	47MHz～ 470MHz	
UHF	470MHz～862MHz	
CATV(M)	68MHz～175MHz	
CATV(S)	230MHz～301MHz	
CATV(H)	302MHz～470MHz	
Intermediate Frequency		
VIF Carrier	38.9MHz(L, B/G, I) / 34.25MHz(L′)	
SIF Carrier	33.4MHz(5.5MHz : B/G) / 32.9MHz(6.0MHz : I) / 32.4MHz(6.5MHz : L) / 40.75MHz(6.5MHz : L′)	
Colour Sub Carrier Freq.		
PAL	4.43MHz	
SECAM	4.0625MHz / 4.25MHz	
NTSC	3.58MHz / 4.43MHz	
Power Input	AC 220V～240V , 50Hz	
Power Consumption	200W(Max), 139W(Avg) / 139W/h (ITALY)	194W(Max), 136W(Avg) / 136W/h (ITALY)
Picture Tube	Visible size : 76cm, Measured diagonally	Visible size : 66cm, Measured diagonally
High Voltage	31.0Kv $^{+1\text{kV}}_{-1.5\text{kV}}$ (at zero beam current)	
Speaker	10 cm round × 2	
Audio Output	10W + 10W	
EXT-1/EXT-2 (Input/Output)	21-pin Euro connector (SCART socket)	
EXT3(Input) Video	1Vp-p 75Ω (RCA pin jack)	
Audio(L/R)	500mVrms(-4dBs), High Impedance(RCA pin jack)	
S-VIDEO	Y : 1Vp-p Positive (negative sync provided, when terminated with 75Ω)	
	C : 0.286Vp-p (burst signal, when terminated with 75Ω)	
Aerial Input Termind	75Ω unbalanced, Coaxial	
Headphone jack	Stereo mini jack (φ3.5mm)	
Remote Control Unit	RM-C795	
	AAA(R03) dry battery × 2	

Design & specification are subject to change without notice.

OPERATING INSTRUCTIONS

JVC

COLOUR TELEVISION

AV-32WH3EP
AV-28WH3EP

CONTENTS

Locations of remote control buttons 2
Locations of TV buttons and parts 3
PREPARATION AND BASIC OPERATION 4
SOUND AND PICTURE 11
OTHER FEATURES 15
TELETEXT 17
OTHER PREPARATION 19
TROUBLESHOOTING 24
CHANNEL TABLE 25
SPECIFICATIONS 27

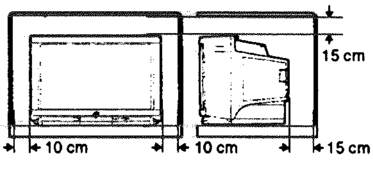
INSTRUCTIONS

Thank you for buying this JVC colour television.
To make sure you understand how to use your new TV, please read this manual thoroughly before you begin.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:
TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified (AC 220 – 240 V, 50 Hz) on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
   When installing this television, distance recommendations must be maintained between the floor and wall, as well as instalment in a tightly enclosed area or piece of furniture. Adhere to the minimum distance guidelines shown for safe operation.

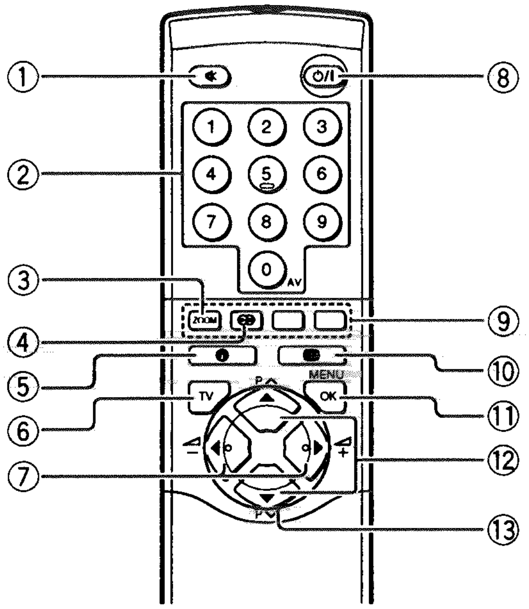


4. Do not allow objects or liquid into the cabinet openings.
5. In the event of a fault, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

When you don't use this TV set for a long period of time, be sure to disconnect the power plug from the AC socket.

Locations of remote control buttons

OUTSIDE BUTTONS



①	Muting button	p.11
②	Number buttons	p.8
③	ZOOM button	p.13
④	Hyper Sound button	p.11
⑤	Information button	p.15
⑥	TV button	
⑦	Volume –/+ buttons	p.8
⑧	Standby button	p.6, 9
⑨	Colour buttons	
⑩	TV/text button	p.17
⑪	OK button	
⑫	PR channel ∨/∧ buttons	p.8
⑬	◀/▶ / ▼/▲ buttons	
⑭	Teletext/VCR control buttons	p.17
⑮	VCR/TEXT selector switch	

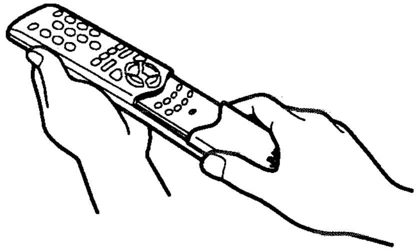
- When switched to the VCR side, the ⑭ buttons function as the JVC VCR control buttons.

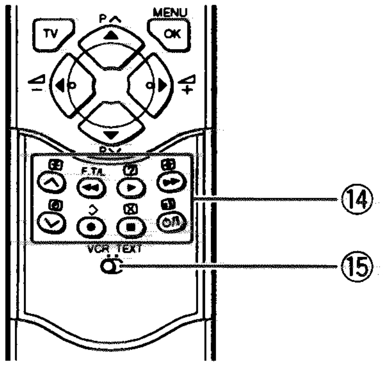
Notes:
- For details on button functions, see the JVC VCR manual.
- Depending on your VCR, the remote control may not operate perfectly, and may not even control the VCR at all.

- When switched to the TEXT side, the ⑭ buttons function as teletext control buttons.

INSIDE BUTTONS

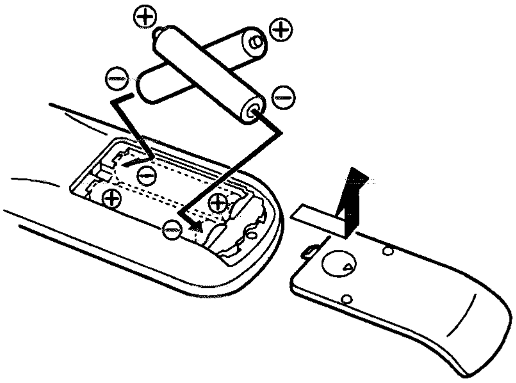
How to open the cover.





Inserting batteries into your remote control

Use two AAA/R03 dry cell batteries. Insert the batteries from the ⊖ end, making sure the ⊕ and ⊖ polarities are correct.

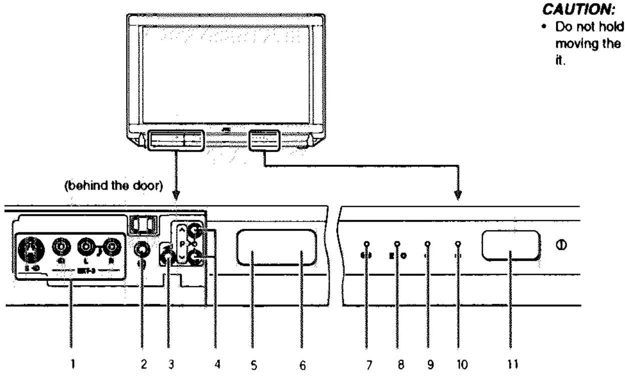


CAUTION:
- Follow the warnings printed on the batteries.

Notes:
- Battery life is approx. six months to one year, depending on frequency of use.
- If the remote control doesn't work properly, replace the batteries.
- The batteries we supply are only for setting up and testing your TV, please replace them as necessary.

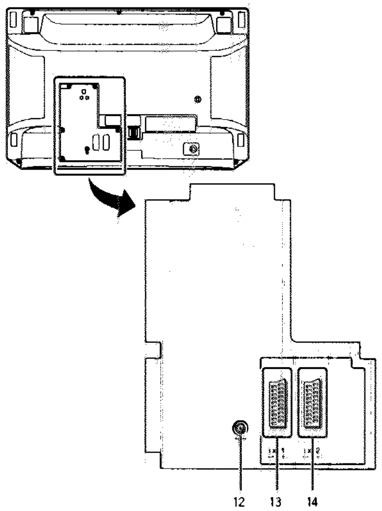
Locations of TV buttons and parts

FRONT PANEL



CAUTION:
- Do not hold the front panel door when moving the TV set, if you do, you may break it.

REAR PANEL

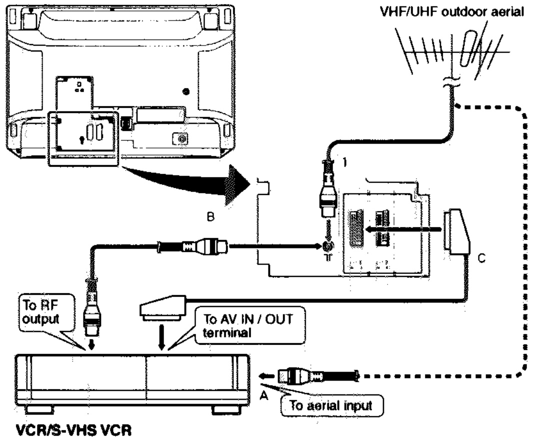


①	EXT-3 terminals	p.4, 19
②	Headphone jack (mini jack)	p.5
③	Volume button (Press this button to display the volume level indicator. Press the 4 Up/down buttons to change volume while the volume level indicator is displayed.)	p.9
④	Up/down buttons (You can use this button as the V/Λ buttons of the PR channel. Pressing the 3 Volume button makes this button function as the Volume –/+ buttons.)	p.9
⑤	Remote control sensor	
⑥	ECO sensor	
⑦	Hyper sound lamp	p.11
⑧	ECO lamp	p.12
⑨	Sleep timer lamp	p.15
⑩	Power lamp	p.6, 9
⑪	Main power button	p.6, 9
⑫	Aerial socket	p.4
⑬	EXT-1 terminal	p.4, 19
⑭	EXT-2 terminal	p.4, 19

PREPARATION AND BASIC OPERATION

1. Connecting the aerial and VCR

If not connecting a VCR, do 1 only.
If connecting a VCR, proceed A ▸ B ▸ C.



Notes:
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- You can view video from a VCR without doing C. For details, refer to the manual provided with your VCR.

2. Connecting other external devices

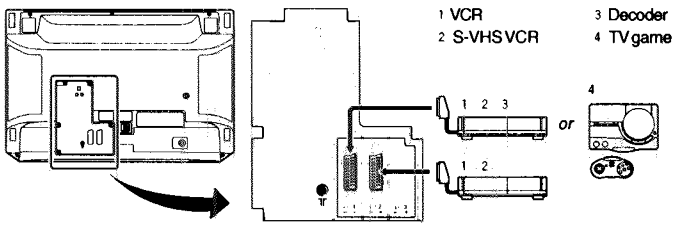
Conditions:
- This TV set has external device connectors, EXT-1 to EXT-3 to which you can connect a VCR. However, there are some differences in functions among them. Consult the following table before making connections.

	EXT-1	EXT-2	EXT-3 (front)
VIDEO IN	√ *1	√ *1	√ *1
VIDEO OUT	√ *2	√ *3	–
S-VIDEO IN	√ *1	√ *1	√ *1
S-VIDEO OUT	–	–	–
RGB IN	√	–	–
AUDIO-L IN	√	√	√
AUDIO-R IN	√	√	√
AUDIO-L OUT	√ *2	√ *3	–
AUDIO-R OUT	√ *2	√ *3	–
Others	• Automatic detection and switching of input mode. • Automatic detection and switching of ZOOM mode.		

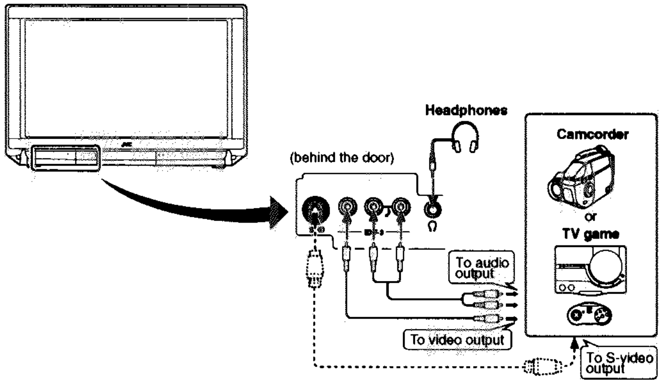
*1 Select VIDEO or S-VIDEO mode from the EXT SETTING menu. For details, see page 19 "EXT SETTING".
*2 Only the TV broadcast is output.
*3 TV broadcasts or inputs from EXT-1 or 3 can be output. For details, see page 19 "DUBBING".

- Use headphones with a stereo mini jack (dia. 3.5 mm).
  When using headphones, the speakers will not output sound.
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.

Devices which can be connected to the terminals on the rear panel

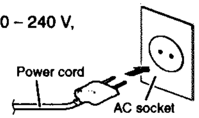

1 VCR
2 S-VHS VCR
3 Decoder
4 TV game
1 2 3
1 2
4
or

Devices which can be connected to the terminals on the front panel


Headphones
(behind the door)
Camcorder
or
TV game
To audio output
To video output
To S-video output

3. Connecting the power cord

Insert the power plug into an AC socket (AC 220 – 240 V, 50 Hz).


Power cord
AC socket

4. Turning the power and TV on

1. Press the Main power button on the TV to turn the power on.

The Power lamp lights red (power on), then green (TV on).

If the power lamp stays red and does not change to green:
Your TV is in the standby mode. Press the Standby button on the remote control to turn your TV on.

Note:
- You can also press the PR channel V/Λ button, a number button or the up/down button on the front panel to turn the TV on.

5. Initial Settings

- When the TV is first turned ON, it enters into the initial setting mode, and the JVC logo is displayed.

Note:
- The TV enters into the initial setting mode only once when the TV is first turned ON. If you turn the TV off or exit from the setting menu while performing the initial settings by mistake, you must redo the initial settings, "LANGUAGE" and "AUTO PROGRAM", following the procedures described in page 22 and 23.

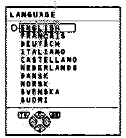
1. Press any button on the remote control.

Language menu appears.

Selecting the on-screen language

You can select your language from ten languages listed on the LANGUAGE menu. The displayed menus on the screen are described in the selected language.

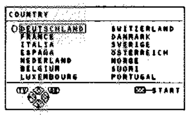
2. Press ▼/▲ button to select ENGLISH.


LANGUAGE
ENGLISH
FRANÇAIS
DEUTSCH
ITALIANO
CASTELLANO
NEDERLANDS
DANSK
NORSK
SVENSKA
SUOMI
TV
OK

Note:
- In this manual, operation procedures are explained in English as the on-screen language is set to ENGLISH. If you select "FRANÇAIS" from the LANGUAGE selection menu, menus are all described in French of course.

3. Press OK button.

English is set for the on-screen display description, and the COUNTRY menu appears.

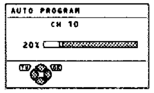

COUNTRY
DEUTSCHLAND
FRANCE
ITALIA
ESPAÑA
NEDERLAND
BELGIUM
LUXEMBOURG
SWITZERLAND
DANMARK
SVERIGE
ÖSTERREICH
NORGE
SUOMI
PORTUGAL
TV
OK
START

Automatically allocating stations to PR channels (AUTO PROGRAM)

To view a TV programme, you must first allocate the broadcast stations to the PR channels. You can automatically allocate up to 99 stations to the PR channels (PR 1 to PR 99) on this TV.

- If this TV identifies a broadcast station name, that station ID is also automatically registered in a PR channel.
- If the cable TV stations support ACI (Automatic Channel Installation), the ACI function will operate in the place of the normal AUTO PROGRAM function and all of the broadcast will be quickly registered in the PR channels in accordance with the instructions for the cable TV station.

4. Press the ▼/▲ and ◄/► buttons to select your country and then press the blue button.



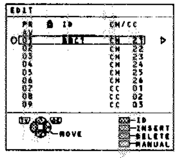
The AUTO PROGRAM menu is displayed and the broadcast stations received by the TV are automatically registered in the PR channels one after another.

Notes:
- If you want to quit the automatic allocation, press the TV button.
- "ACI" is displayed in the AUTO PROGRAM menu while the ACI function is operating.
- The ACI function may not operate correctly if you don't have good reception.

If the ACI menu is displayed:
Press the ▼/▲ button to select the area in which you live and then press the OK button.

If "ACI ERROR" is displayed in the AUTO PROGRAM menu:
Press the OK button again to start the ACI function. If the "ACI ERROR" is displayed again, press the ► button to change to the AUTO PROGRAM function and register the stations in the PR channels.

The EDIT menu is displayed after the allocation is completed.
- If you want to edit the PR channels or allocate a station to PR 0 channel, see page 20 "EDIT/MANUAL" for a description of the procedure.



Notes:
- If a station you want to view is not allocated to a PR channel, manually allocate it. (See page 22.)
- The EDIT menu can be used to edit the PR channels in the following ways.
  - Delete an unnecessary station
  - Change a PR channel number
  - Register a station ID
  - Add a station
  - Manually allocate a station

● The procedure is complete.
Press the TV button to exit the menu.

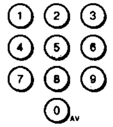
6. *Viewing a television programme*

1. Select a PR channel.

Selection

- Press the PR channel V/∧ button.

Direct channel selection

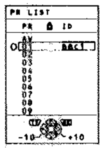


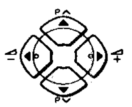
- Press the corresponding number buttons.
  Example: To select channel 6, press "6".
  To select channel 12, press "1" and "2".

Notes:
- If you don't have a clear picture or no colour appears, change the colour system manually (see page 12 for details).
- Enter "0" when selecting an AV channel (PR 0 channel).

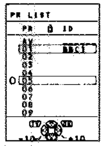
To use the PR LIST to select a PR channel

1. Press the Information button repeatedly to select the PR LIST.
   The PR LIST appears.
   - To exit the PR LIST, press the TV button.





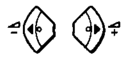
2. Press ▼/▲ buttons to select a PR channel.
   - Press ► button to view the next page of the PR LIST.
   - Press ◄ button to view the previous page of the PR LIST.



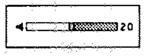
Note:
- The 🔒 mark will appear on the PR channel when the CHILD LOCK setting is on (see page 16).

3. Press OK button.

2. Press the Volume –/+ buttons.



The Volume level indicator appears and the volume changes as you press the Volume –/+ buttons.



Turning the TV and power off

1. Press the Standby button to turn the TV off.

The Power lamp changes from green to red.
The TV enters standby mode.

2. Press the Main power button on the TV to turn the main power off.

The Power lamp goes off.

Note:
- To save energy, we recommend that you turn the main power off when you are not using the TV.

To select a channel without using the remote control

You can also use the buttons on the front panel of the TV.

1. Press the Up/down button to turn your TV on.

The Power lamp changes from red to green.

Note:
- If your TV does not turn on, press the Main power button, and then press the Up/down button again.

2. Press the Up/down button to select the PR channel.

Note:
- You can't change PR channels when the volume level indicator is displayed.

3. Adjust the volume.

1. Press the Volume button.
   The volume level indicator appears.
2. Press the Up/down button while the volume level indicator is displayed.

● To turn off your TV, press the Main power button.

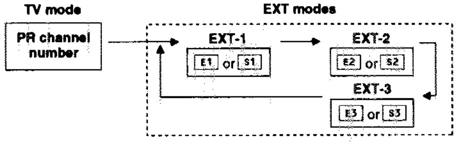
The Power lamp goes off.

Viewing images from external devices

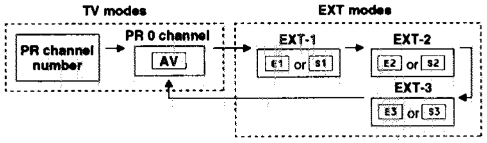
1. Repeatedly press the 0 button to select the EXT terminal.

The current selection appears, and disappears after several seconds.

When a station is not registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:



When a station is registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:



Notes:
- To use S-Video mode to view input from an S-VHS VCR, see "To select S-VIDEO input for a terminal" on page 19. When selecting EXT-1, EXT-2 or EXT-3 input terminals as S-VIDEO input, E1, E2 or E3 changes to S1, S2 or S3 in the display.
- If you don't have a clear picture or no colour appears, change the colour system manually (see page 12).
- When selecting an EXT terminal with no input signal, the EXT number and ID become fixed on screen.

TV mode:
Shows images input from an external device (such as a VCR) or TV aerial connected to the aerial socket of your TV.

EXT modes:
Shows images input from an external device (such as a VCR) connected to the selected EXT terminal.

The EXT terminal can be selected with the following method.
- Repeatedly press the PR channel V/Λ button.
- Repeatedly press the up/down button inside the TV front panel door.
- Use the PR LIST.
  1. Repeatedly press the information button to display the PR LIST.
  2. Press the ▼/▲ / ◀/▶ buttons to select the EXT terminal.
  3. Press the OK button.

Note:
- Each EXT terminal is registered after the PR 99 channel.

SOUND AND PICTURE

MUTING

You can render the volume to 0 instantly. This is convenient when answering the phone or when receiving visitors.

1. **Press ⓧ (Muting).**

   The sound is rendered inaudible.

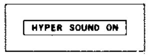
To restore the sound:
Press the Muting button again.

HYPER SOUND

You can enjoy sounds with a wider atmosphere by using Hyper sound.

1. **Press ⓗ (Hyper Sound).**

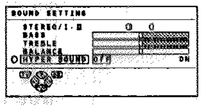
   The HYPER SOUND ON appears.


HYPER SOUND ON

To return to normal sound:
Press the Hyper Sound button again.

- If you turned on HYPER SOUND, the Hyper sound lamp lights.
- HYPER SOUND can be also set to ON by operating MENU.

1. Press the OK button.
   The MENU appears.
2. Press the ▼/▲ button to select SOUND SETTING, and press the OK button.
   The SOUND SETTING menu appears.
3. Press the ▼/▲ button to select HYPER SOUND.


SOUND SETTING
STEREO/I·II
BASS
TREBLE
BALANCE
HYPER SOUND
OFF
ON

4. Press the ◀/▶ button to select ON, OFF.
5. Press the OK button.
   This completes the setting.

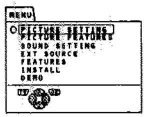
MULTI SOUND

You can select the multi sound mode for stereo broadcast programmes and bilingual programmes.

Note:
- The MULTI SOUND function has no effect on programmes other than A2 or NICAM broadcast programmes.

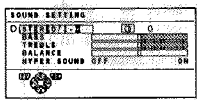
1. **Press OK.**

   The MENU appears.


MENU
PICTURE SETTING
PICTURE FEATURES
SOUND SETTING
EXT SOURCE
FEATURES
INSTALL
DEMO

2. **Press ▼/▲ to select SOUND SETTING, then press OK.**

   The SOUND SETTING menu appears.


SOUND SETTING
STEREO/I·II
0
BASS
TREBLE
BALANCE
HYPER SOUND
OFF
ON

3. **Press ▼/▲ to select STEREO / I • II.**

Notes:
- The multi sound mode display is different from the broadcast programme.
- The multi sound function does not work in EXT modes. The STEREO / I•II does not appear in SOUND SETTING menu.

4. **Press ◀/▶ to select a multi sound mode.**

   - ⓢ : Stereo sound
   - I : Bilingual I (Sub I)
   - II : Bilingual II (Sub II)
   - 0 : Normal sound

5. **Press OK.**

   This completes the setting.

Note:
- When you display the current PR channel number, the current multi sound mode appears for approximately 3 seconds.

TINT

You can choose from among three TINT modes.

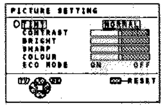
1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select PICTURE SETTING, then press OK.**

   The PICTURE SETTING menu appears.

3. **Press ▼/▲ to select TINT.**


PICTURE SETTING
TINT
NORMAL
CONTRAST
BRIGHT
SHARP
COLOUR
ECO MODE
ON
OFF
RESET

4. **Press ◀/▶ to select a tint mode.**

   COOL:
   A cool white colour base with a boost in the colour and contrast levels. Creating a more vivid picture.

   WARM:
   Use this mode when viewing film programmes.

   NORMAL:
   A normal white colour base with no boost in the colour or contrast levels.

5. **Press OK.**

   This completes the setting.

COLOUR SYSTEM

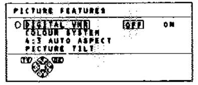
The colour system is automatically selected, but if the picture is not clear or no colour appears, select the colour system manually.

1. **Press OK.**

   The MENU appears.

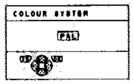
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**

   The PICTURE FEATURES menu appears.


PICTURE FEATURES
DIGITAL VHS
OFF
ON
COLOUR SYSTEM
4:3 AUTO ASPECT
PICTURE TILT

3. **Press ▼/▲ button to select COLOUR SYSTEM, then press OK.**

   The COLOUR SYSTEM menu appears.


COLOUR SYSTEM
PAL

4. **Press ◀/▶ to select the appropriate colour system.**

   PAL:
   PAL system.

   SECAM:
   SECAM system.

   NTSC3.58:
   NTSC 3.58 MHz system.

   NTSC4.43:
   NTSC 4.43 MHz system.

   AUTO:
   Automatic colour system selection.

Notes:
- Auto may not function properly depending on signal quality. If the picture is abnormal in AUTO mode, select another colour system manually.
- When in TV mode (PR 1 to PR 99), you cannot select AUTO, NTSC 3.58 or NTSC 4.43.
- When in TV mode (PR 0), you cannot select NTSC 3.58 or NTSC 4.43.

5. **Press OK.**

   This completes the setting.

PICTURE/SOUND ADJUSTMENT

You can adjust the picture and sound as you like.

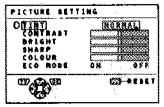
To adjust the picture

1. **Press OK.**

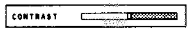
   The MENU appears.

2. **Press ▼/▲ to select PICTURE SETTING, then press OK.**

   The PICTURE SETTING menu appears.


PICTURE SETTING
TINT
NORMAL
CONTRAST
BRIGHT
SHARP
COLOUR
ECO MODE
ON
OFF
RESET

3. **Press ▼/▲ to select an item, and press ◀/▶ to adjust it.**



- To return to the default settings, press blue button.

◀	Item	▶
Lower	CONTRAST (picture contrast)	Higher
Darker	BRIGHT (picture brightness)	Brighter
Softer	SHARP (picture sharpness)	Sharper
Lighter	COLOUR (picture colour)	Deeper
Reddish	HUE (picture hue)	Greenish

Note:
- You can adjust the HUE (picture hue) only when the colour system is NTSC 3.58 or NTSC 4.43.

4. **Press OK.**

   This completes the setting.

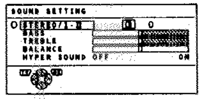
To adjust the sound

1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select SOUND SETTING, then press OK.**

   The SOUND SETTING menu appears.


SOUND SETTING
STEREO/I·II
0
BASS
TREBLE
BALANCE
HYPER SOUND
OFF
ON

3. **Press ▼/▲ to select an item, and press ◀/▶ to adjust it.**

◀	Item	▶
Weaker	BASS (low frequency sound)	Stronger
Weaker	TREBLE (high frequency sound)	Stronger
Left	BALANCE (audio balance)	Right

4. **Press OK.**

   This completes the setting.

ECO MODE

When you set ECO mode to ON, the screen contrast is automatically adjusted to a setting suitable for the brightness of your room.
This reduces eye strain and the power consumption of the TV.

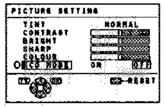
1. **Press OK.**

   The MENU appears.

2. **Press ▼/▲ to select PICTURE SETTING, then press OK.**

   The PICTURE SETTING menu appears.

3. **Press ▼/▲ to select ECO MODE.**


PICTURE SETTING
TINT
NORMAL
CONTRAST
BRIGHT
SHARP
COLOUR
ECO MODE
ON
OFF
RESET

4. **Press ◀/▶ to select ON, OFF.**

5. **Press OK.**

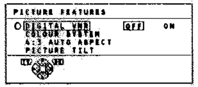
   This completes the setting.

   - If you turned on ECO mode, the ECO lamp lights.

DIGITAL VNR

When you set DIGITAL VNR to ON, you can reduce the noise on the screen so improving picture quality further.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select DIGITAL VNR.**



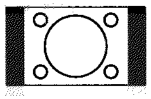
4. **Press ◀/▶ to select ON, OFF.**
5. **Press OK.**
   This completes the setting.

ZOOM

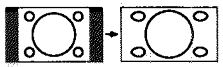
Select a ZOOM mode to change the picture format. You can enlarge the picture to fill the wide TV screen (16:9 aspect ratio). In addition, you can stretch a normal picture (4:3 aspect ratio) to fill the wide TV screen.

Notes:
- The picture format information of the present broadcasting programme may be received as WSS (Wide Screen Signalling). When AUTO mode is selected for ZOOM mode and the WSS signal is received, this TV automatically selects the optimum ZOOM mode corresponding to the WSS signal. However, in the case of weak WSS signal reception, this function may not work correctly. In this case, select an optimum ZOOM mode manually.
- If the EXT-1 or EXT-2 terminal's input is from a picture signal with a 16:9 aspect ratio picture format, the ZOOM mode may automatically changes to FULL mode. This is because the TV detects an identification signal which is not an WSS signal.

REGULAR mode:
Use to view a normal picture (4:3 aspect ratio) unchanged.



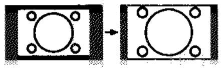
PANORAMIC mode:
Stretches the left and right sides of a normal picture to fill the screen, in a way that does not appear unnatural.



(PANORAMIC)

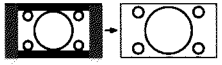
Note:
- In PANORAMIC mode, the top and bottom of the picture are slightly cut off.

14:9 ZOOM mode:
Use to expand a picture with a 14:9 aspect ratio.



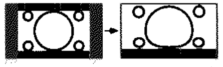
(14:9 ZOOM)

16:9 ZOOM mode:
Use to expand a wide picture (16:9 aspect ratio).



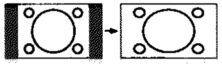
(16:9 ZOOM)

16:9 ZOOM SUBTITLE mode:
Use to expand a picture with a 16:9 aspect ratio having subtitles at the bottom of the screen.



(16:9 ZOOM SUBTITLE)

FULL mode:
Uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



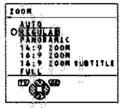
(FULL)

Note:
- For pictures with a 16:9 aspect ratio that have been squeezed into a normal picture (4:3 aspect ratio), select FULL mode to restore their original dimensions.

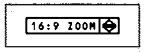
Manual ZOOM selection

you can select a disired ZOOM mode manually.

1. **Press ZOOM.**
   The ZOOM menu appears.



2. **Press ▼/▲ to select a ZOOM mode.**
3. **Press OK.**
   The picture expands and the selected ZOOM mode is displayed in about 5 seconds.



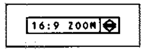
(Continued to the next page)

To move the picture vertically:

If you cannot see subtitles at the bottom of the screen, or if the top or bottom is cut off, move the picture vertically.

Notes:
- You cannot move the picture vertically in AUTO, REGULAR and FULL mode.

1. **Press ZOOM.**
   The ZOOM menu appears.
2. **Press OK.**
   The ZOOM mode is displayed in about 5 seconds.



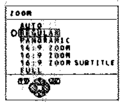
3. **Before the display disappears, press ▼/▲ to move the picture up or down.**

Note:
- To return the picture to its default position, press the ZOOM button to display the ZOOM menu and press the OK button.

Automatic ZOOM selection (AUTO mode)

You can set your TV to automatically select the optimum ZOOM mode to suit the picture format.

1. **Press ZOOM.**
   The ZOOM menu appears.



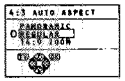
2. **Press ▼/▲ to select AUTO.**
3. **Press OK.**
   Your TV automatically selects the optimum ZOOM mode to suit the current programme's picture format.

Note:
- This function may not work correctly depending on the programme. In this case, select the optimum ZOOM mode manually.

To preset a ZOOM mode for the normal picture:

You can preset one of three ZOOM modes, REGULAR, PANORAMIC or 14:9 ZOOM, as the ZOOM mode for the normal picture (4:3 aspect ratio).

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select 4:3 AUTO ASPECT, then press OK.**
   The 4:3 AUTO ASPECT menu appears.



4. **Press ▼/▲ to select a ZOOM mode.**
5. **Press OK.**
   This completes the setting.

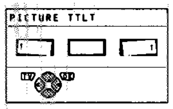
PICTURE TILT

(except AV-28WH3EP)

The AV-32WH3EP has a large picture tube in which a picture could be tilted to the left or right because of magnetic pull from the earth. Use the procedure described below to adjust the picture.

Note:
- The AV-28WH3EP does not have the tilted image correction function.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select PICTURE TILT, then press OK.**
   The PICTURE TILT menu appears.



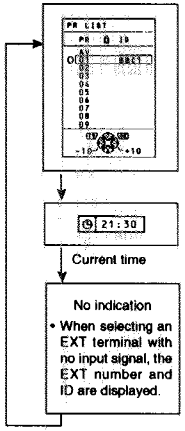
4. **Press ◀/▶ to select the direction to which you want to correct the tilted image on your screen.**
   ☐ : *If it is inclined to the left, select this symbol to correct it.*
   ☐ : *If it is inclined to the right, select this symbol to correct it.*
   ☐ : *If it is not inclined to either the left or right, select this symbol to set it as it is.*
5. **Press OK.**
   The correction is complete.

OTHER FEATURES

INFORMATION

You can display the PR LIST or the current time.

1. **Press ⓘ (Information) repeatedly.**
   The display changes cyclically in the following order.


PR LIST
PR
ID
AV
BBC1
01
02
03
04
05
06
07
08
09
-10
+10
21:30

Current time

No indication
- When selecting an EXT terminal with no input signal, the EXT number and ID are displayed.

About PR LIST:
- Ten positions including the currently selected PR channel will be displayed as a list.
  Press ▼/▲ / ◀/▶ to select the desired PR channel. For details see page 8.

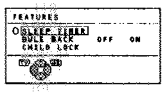
About the current time display:
This TV uses teletext data to determine the current time.
- If the TV has not received a station that has teletext data since it was turned on, the time display is blank. To view the current time, select a station that is broadcasting teletext data. As long as you do not turn off the TV, then even if you select other stations, the time will still be displayed.
- When watching videos, the wrong current time is sometimes displayed.

SLEEP TIMER

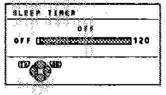
You can set the TV to automatically turn off after a specified period of time.

Note:
- The SLEEP TIMER does not turn off the Main power.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select FEATURES, then press OK.**
   The FEATURES menu appears.


FEATURES
SLEEP TIMER
BLUE BACK
OFF
ON
CHILD LOCK

3. **Press ▼/▲ to select SLEEP TIMER, then press OK.**
   The SLEEP TIMER menu appears.


SLEEP TIMER
OFF
OFF
120

4. **Press ◀/▶ to select a period of time.**
   You can set the period of time a maximum of 120 minutes in 10 minute increments.
   OFF:
   Turns off the SLEEP TIMER.
5. **Press OK.**
   - The Sleep timer lamp lights if you set the SLEEP TIMER.

To display the remaining Sleep timer time:
Perform steps 1 to 3 to display the SLEEP TIMER menu, and press OK button when you finish checking the time.

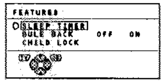
To turn off the Sleep timer:
Perform steps 1 to 3 to display the SLEEP TIMER menu, press ◀ button to select "OFF", and then press OK button.
- The Sleep timer lamp goes out.

Note:
- One minute before the SLEEP TIMER turns off the TV, "GOOD NIGHT!" appears.

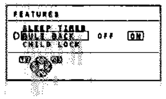
BLUE BACK

When viewing a PR channel with no or poor reception, or if there is no input from an external device, you can mute the sound and change the picture into a blue picture.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select FEATURES, then press OK.**
   The FEATURES menu appears.


FEATURES
SLEEP TIMER
BLUE BACK
OFF
ON
CHILD LOCK

3. **Press ▼/▲ to select BLUE BACK.**


FEATURES
SLEEP TIMER
BLUE BACK
OFF
ON
CHILD LOCK

4. **Press ◀/▶ to select ON or OFF.**
5. **Press OK.**
   This completes the setting.

CHILD LOCK

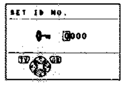
You can lock some PR channels to prevent your children from watching them.

To set the CHILD LOCK

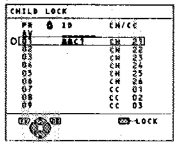
1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select FEATURES, then press OK.**
   The FEATURES menu appears.

FEATURES
SLEEP TIMER
BLUE BACK
OFF
ON
CHILD LOCK

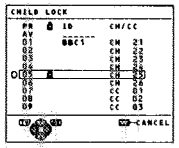
3. **Press ▼/▲ to select CHILD LOCK, then press 0 button.**
   The SET ID NO menu appears.


SET ID NO.
000

4. **Enter the ID number.**
   1. Press ▼/▲ to select a number.
   2. Press ◀/▶ to move the cursor.
5. **Press OK.**
   The CHILD LOCK menu appears.


CHILD LOCK
PR
ID
CH/CC
AV
01
02
03
04
05
06
07
08
09
BBC1
CH 21
CH 22
CH 23
CH 24
CH 25
CH 26
CC 01
CC 02
CC 03
LOCK

6. **Press ▼/▲ to select a PR channel, then press the blue button.**
   The selected PR channel is locked.


CHILD LOCK
PR
ID
CH/CC
AV
01
02
03
04
05
06
07
08
09
BBC1
CH 21
CH 22
CH 23
CH 24
CH 25
CH 26
CC 01
CC 02
CC 03
CANCEL

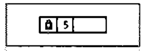
- To cancel the CHILD LOCK:
  Press the blue button again.
- Repeat step 6 to lock all PR channels which you want to lock.

7. **Press OK.**
   This completes the setting.

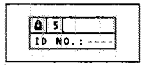
Notes:
- You cannot select a locked PR channel using the PR channel V/Λ buttons.
- Even if you can select a locked channel and display it, you can not view the programme of the locked channel.

To view a locked PR channel

1. **Select a locked PR channel.**
   - Use the number buttons to select the PR channel.
     The locked channel is displayed.



2. **Press ⓘ (Information).**
   The ID NO. input menu appears.



3. **Press the number buttons to enter the ID number.**
   You are now viewing the locked PR channel.

If you forget the ID number:
Perform steps 1 to 3 of "To set the CHILD LOCK". After you confirm the ID number, press the TV button to exit the menu.

DEMONSTRATION

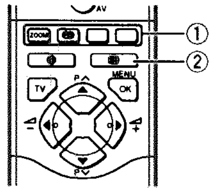
The demonstration runs automatically and introduces the menus of this TV's main features.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select DEMO, then press OK.**
   The demonstration begins.
   - To stop the demonstration, press any button on the remote control.

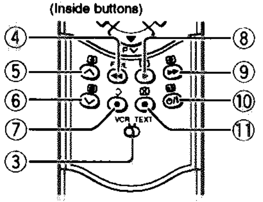
TELETEXT

Note:
- If you have trouble receiving teletext broadcasts, consult your local dealer or the teletext station.

(Outside buttons)



(Inside buttons)



1 Colour buttons
2 TV/text button
3 VCR/TEXT selector switch
- When this switch is set to the TEXT side, the following buttons function as the teletext control button.

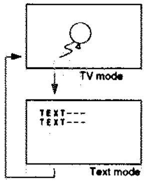
4 MODE button
5 HOLD button
6 SUB PAGE button
7 STORE button
8 REVEAL button
9 SIZE button
10 INDEX button
11 DISPLAY CANCEL button

BASIC TELETEXT OPERATION

You can view three types of teletext broadcasts on the TV: Fastext, TOP and WST. The TV automatically recognizes the type of teletext broadcast.

Condition:
- The VCR/TEXT selector switch must already be set to the TEXT side.

1. **Select a channel with a teletext broadcast.**
2. **Press ▣ (TV/text).**



3. **Select a page number.**

   Browse:
   Press the PR channel ∨/∧ button on the remote control.

   Direct selection:
   Press the number buttons to enter a three-digit page number.

   Colour button selection:
   Press a colour button to select the corresponding page number on the bottom line of the screen.

Notes:
- Category names of teletext pages may appear instead of page numbers.
- In principle, ZOOM mode is fixed to FULL mode when you view Teletext programmes.
- Some Teletext programmes display a mixture of regular TV programmes and Teletext information. When viewing these programmes, ZOOM mode returns to the mode you selected before you started viewing Teletext programmes. With the ZOOM mode, the Teletext information may not be displayed in the correct position. If this happens, press the TV/Text button to cancel the Text mode, then change the ZOOM mode to the PANORAMIC mode or FULL mode.

● To return to TV mode, press the TV/text button.

Notes:
- You can also return to TV mode by pressing the TV button.
- None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.

DISPLAY CANCEL

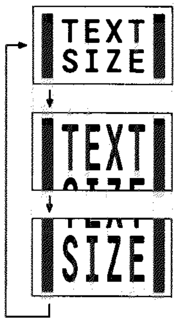
You can search for a teletext page while watching TV.

1. **Select a teletext page.**
   The TV searches for a teletext page.
2. **Press DISPLAY CANCEL.**
   The TV programme appears.
   When the TV finds the teletext page, its page number appears in the upper left of the screen.
3. **Press ▣ (TV/text) when the page number is on the screen.**

SIZE

You can double the height of the teletext display.

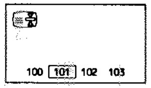
1. **Press SIZE repeatedly.**



HOLD

You can hold a teletext page on the screen for as long as you want, even while several other teletext pages are being received.

1. **Press HOLD.**
   ⊞ is displayed in the upper left of the screen, and the teletext page is held on the screen.



To release hold mode:
Press HOLD button again.

INDEX

Just press INDEX button to return to the index page.

1. **Press INDEX.**

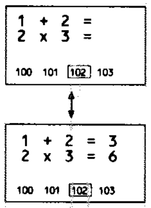
   Fastext/TOP/WST:
   Returns to page 100 or a previously specified page.

   LIST mode:
   Returns to the page number displayed in the lower left area of the screen.

REVEAL

Some teletext pages include hidden text (such as answers to a quiz).

1. **Press REVEAL.**
   Each time you press REVEAL button, text is hidden or revealed.



LIST MODE

You can store the numbers of your favourite teletext pages and call them up quickly using the colour buttons.

Note:
- You can store up to 64 pages in memory. You can store four pages in each channel from 1 to 15 (60 pages), and four pages that are the same for all channels above channel 15 (4 pages).

To store the page numbers

1. **Press MODE to engage LIST mode.**
   Stored page numbers are displayed at the bottom of the screen.
2. **Press a colour button, then enter the number of the teletext page.**
   To assign other pages to remaining colour buttons, repeat this operation.
3. **Press and hold STORE.**
   The four page numbers blink white to indicate that they are stored in memory.

To call up a stored page

1. **Press MODE to engage LIST mode.**
   Stored page numbers are displayed at the bottom of the screen.

   To release LIST mode:
   Press MODE button again.
2. **Press a colour button to which a page has been assigned.**

SUB PAGE

Some teletext pages include sub-pages that are automatically displayed. You can hold any sub-page, or view it at any time.

1. **Call up a teletext page with sub-pages.**
2. **Press SUB PAGE.**
   Sub-page numbers are displayed at the left of the screen.

   Background colour of the sub-page number is yellow:
   This is the number of the sub-page which is currently being displayed.

   Background colour of the sub-page number is white:
   These are the numbers of the sub-pages which can be displayed.

   Background colour of the sub-page number is blue or red:
   These are the numbers of sub-pages which have not been sent and can therefore not be displayed.
3. **Press ▼/▲ button to select a sub-page number.**

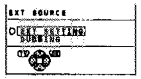
OTHER PREPARATION

EXT SETTING

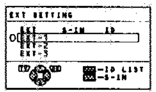
You can select S-VIDEO or normal input for the EXT-1, EXT-2 and EXT-3 terminals, and you can give an EXT ID to each EXT input terminal.

To select S-VIDEO input for a terminal

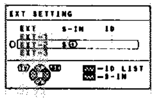
1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.


EXT SOURCE
EXT SETTING
DUBBING

3. **Press ▼/▲ to select EXT SETTING, then press OK.**
   The EXT SETTING menu appears.


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
ID LIST
S-IN

4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press the yellow button.**
   The S-VIDEO input indication appears.
   - To select normal input, press the yellow button again.

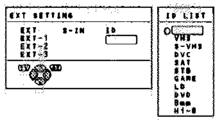

EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
ID LIST
S-IN

- If you want to set an EXT ID here, perform the operation procedures from the step 4 of the section "To give an EXT ID to an EXT input terminal" in the next column.

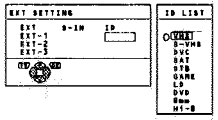
6. **Press OK.**
   The menu disappears.

To give an EXT ID to an EXT input terminal

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.
3. **Press ▼/▲ to select EXT SETTING, then press OK.**
   The EXT SETTING menu appears.
4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press the blue button.**
   The ID LIST appears.


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
ID LIST
VHS
S-VHS
DVC
SAT
STB
GAME
LD
DVD
8mm
Hi-8

6. **Press ▼/▲ to select a EXT ID.**


EXT SETTING
EXT
S-IN
ID
EXT-1
EXT-2
EXT-3
ID LIST
VHS
S-VHS
DVC
SAT
STB
GAME
LD
DVD
8mm
Hi-8

Note:
- To erase the EXT ID, select a blank space.

7. **Press OK.**

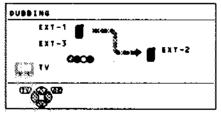
● This completes the procedure. Press the TV button to exit the menu.

DUBBING

Select output to a VCR or other device connected to the EXT-2 terminal. Note that you cannot output from the EXT-2 terminal when the TV is turned off.

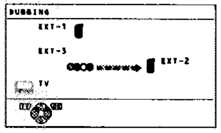
Note:
- RGB signals from TV games and TELETEXT screens cannot be output from EXT-2 terminal.

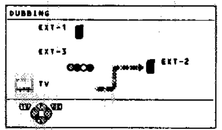
1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.
3. **Press ▼/▲ to select DUBBING, then press OK.**
   The DUBBING menu appears.


DUBBING
EXT-1
EXT-3
TV
EXT-2

4. **Press ▼/▲ to select the input which you want to output from EXT-2.**

TV:
The sound and picture of the currently selected PR channel is output from EXT-2, so you can record the output on a VCR connected to the EXT-2 terminal while watching a video input from the EXT-1 or EXT-3 terminal.


DUBBING
EXT-1
EXT-3
TV
EXT-2


DUBBING
EXT-1
EXT-3
TV
EXT-2

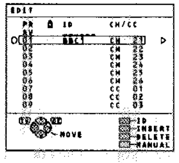
5. **Press OK.**
   The menu disappears.

EDIT/MANUAL

You can change PR channel settings by doing any of the following:
- You can delete an unwanted station from a PR channel,
- You can change the PR channel number of a station,
- You can add station IDs to PR channels,
- You can add a new station to a PR channel, or
- You can manually allocate the desired station to a PR channel.

To edit PR channels

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select INSTALL, then press OK.**
   The INSTALL menu appears.
3. **Press ▼/▲ to select EDIT/MANUAL, then press OK.**
   The EDIT menu appears.

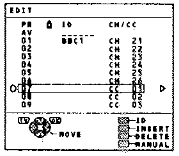

EDIT
PR
ID
CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

4. **Use any of the procedures described in the following pages to change the PR channel settings.**

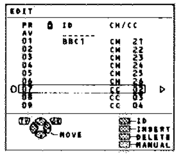
● This completes the procedure. Press the TV button to exit the menu.

To delete a station from a PR channel

1. **Press ▼/▲ to select the station you want to delete.**


EDIT
PR
ID
CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

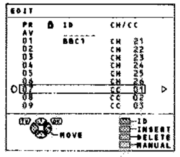
2. **Press the yellow button.**


EDIT
PR
ID
CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

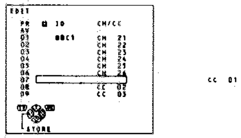
Note:
- Stations allocated to PR channels following the deleted PR channel number are shifted back by one to the preceding PR channel number.

To change the PR channel number of a station

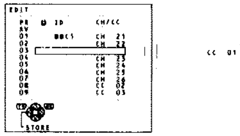
1. **Press ▼/▲ to select the station.**


EDIT
PR
ID
CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

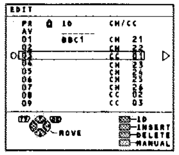
2. **Press ▶.**


EDIT
PR
ID
CH/CC
CC 01
STORE

3. **Press ▼/▲ to move the selected station to the desired PR channel number.**
   - To cancel the operation, press the (Information) button.

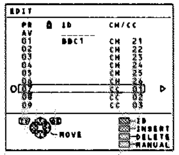

EDIT
PR
ID
CH/CC
CC 01
STORE

4. **Press ◀.**

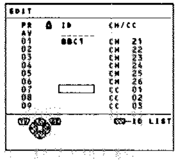

EDIT
PR
ID
CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

To add a station ID to a station

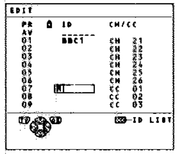
1. **Press ▼/▲ to select the station.**


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

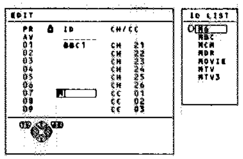
2. **Press the red button.**


EDIT
PR ID CH/CC
ID LIST

3. **Press ▼/▲ to select the first letter of the desired station's ID.**

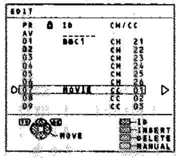

EDIT
PR ID CH/CC
ID LIST

4. **Press the blue button.**
   The ID LIST menu appears.


EDIT
PR ID CH/CC
ID LIST
BBC
RBC
MCM
MDR
MOVIE
MTV
MTV3

5. **Press ▼/▲ to select the station ID.**
   - To cancel the operation, press the (Information) button.

6. **Press OK.**
   Returns to the EDIT menu.


EDIT
PR ID CH/CC
MOVIE
MOVE
ID
INSERT
DELETE
MANUAL

Programming a station's ID manually:

Follow the operations below in place of steps 3 thru 5.

(1) Press the ▼/▲ button repeatedly to select a character.

(2) Press the ▶ button to move cursor to input position.

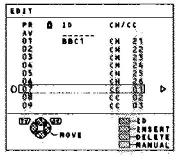
- Pressing the ◀ button moves the cursor backward.

(3) To complete station ID, follow steps (1) and (2) repeatedly.

- A station ID can have up to 6 characters.

To add a new station to a PR channel

1. **Press ▼/▲ to select the row containing the PR channel number to which you want to add a station.**

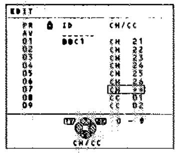

EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

2. **Press the green button.**

3. **Press ▼/▲ to display the enter number indicator.**

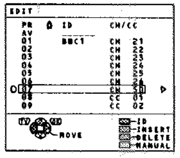
CH: to add terrestrial broadcast stations
CC: to add cable TV stations

- To cancel the operation, press the (Information) button.


EDIT
PR ID CH/CC
0 - 9
CH/CC

Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 25.

4. **Press the number buttons to enter the channel number.**
   - To enter a one-digit channel number, enter the corresponding number and press OK button.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

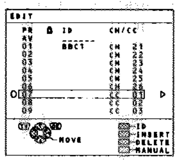
Note:
- When you add a station, the station preset to PR99 is deleted.

To manually allocate a station to PR channel (Manual allocation)

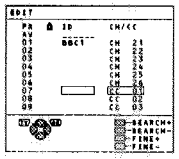
Condition:
- To manually allocate French stations to PR channels, you must set COUNTRY to FRANCE. If COUNTRY is set to any other country than FRANCE, perform "AUTO PROGRAM" steps 1 thru 4 on page 23 to set COUNTRY to FRANCE. Then press the (Information) button to return to the INSTALL menu. Finally press the ▼/▲ button to select EDIT/MANUAL, and press the OK button to return to the EDIT menu.

1. **Press ▼/▲ to select a PR channel number.**

Note:
- PR channel number "AV" appears on the screen as PR 0 channel. We recommend that you allocate this PR channel to a VCR connected to the aerial socket.


EDIT
PR ID CH/CC
MOVE
ID
INSERT
DELETE
MANUAL

2. **Press the blue button.**
   Your TV enters the Manual allocation mode.


EDIT
PR ID CH/CC
SEARCH+
SEARCH-
FINE+
FINE-

3. **Press the green or red button to search for a station.**
   Scanning stops when the TV receives a broadcast.
   Press the green or red button to search for another station, and keep searching until you see the station you want.

CH: Terrestrial broadcast stations
CC: Cable TV stations

When COUNTRY is set to FRANCE, the broadcast system is displayed as "(B/G)", "(I)" or "(L)" to the right of the PR channel number. If the signal of a station is incorrectly received, press the ▶ button to change the broadcast system and then repeat step 3.

If reception is poor:
Press the blue or yellow button to fine-tune the station.

Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 25.

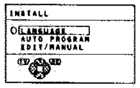
4. **Press OK.**
   The station is allocated to a PR channel.

LANGUAGE

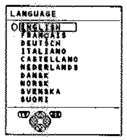
You can select one of ten languages for the on-screen display.

1. **Press OK.**
   The MENU appears.

2. **Press ▼/▲ to select INSTALL, then press OK.**
   The INSTALL menu appears.


INSTALL
LANGUAGE
AUTO PROGRAM
EDIT/MANUAL

3. **Press ▼/▲ to select LANGUAGE, then press OK.**
   The LANGUAGE menu appears.


LANGUAGE
ENGLISH
FRANÇAIS
DEUTSCH
ITALIANO
CASTELLANO
NEDERLANDS
DANSK
NORSK
SVENSKA
SUOMI

4. **Press ▼/▲ to select a language.**

5. **Press OK.**
   This completes the setting.

AUTO PROGRAM

If the "Initial Settings" on page 6 are stopped midway or if you want to perform the PR channel automatic allocation again, perform the operation in accordance with this explanation of the AUTO PROGRAM.

You can automatically allocate up to 99 stations to the PR channels (PR 1 to PR 99) on this TV.

- If this TV identifies a broadcast station name, that station ID is also automatically registered in a PR channel.
- If the cable TV stations support ACI (Automatic Channel Installation), the ACI function will operate in the place of the normal AUTO PROGRAM function and all of the broadcast will be quickly registered in the PR channels in accordance with the instructions for the cable TV station.

1. **Press OK.**

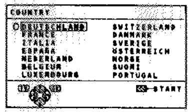
   The MENU appears.

2. **Press ▼/▲ to select INSTALL, then press OK.**

   The INSTALL menu appears.

3. **Press ▼/▲ to select AUTO PROGRAM, then press OK.**

   The COUNTRY menu appears.



4. **Press ▼/▲ / ◀/▶ to select your country.**

5. **Press the blue button.**

   The AUTO PROGRAM menu is displayed and the broadcast stations received by the TV are automatically registered in the PR channels one after another.

If the ACI menu is displayed:
Press the ▼/▲ button to select the area in which you live and then press the OK button.

If "ACI ERROR" is displayed in the AUTO PROGRAM menu:
Press the OK button again to start the ACI function. If the "ACI ERROR" is displayed again, press the ▶ button to change to the AUTO PROGRAM function and register the stations in the PR channels.

Notes:
- If you want to quit the automatic allocation, press the TV button.
- "ACI" is displayed in the AUTO PROGRAM menu while the ACI function is operating.
- The ACI function may not operate correctly if you don't have good reception.

The EDIT menu is displayed after the allocation is completed.

- If you want to edit the PR channels or allocate a station to PR 0 channel, see page 20 "EDIT/MANUAL" for a description of the procedure.

Notes:
- If a station you want to view is not allocated to a PR channel, manually allocate it. (See page 22.)
- The EDIT menu can be used to edit the PR channels in the following ways.
  - Delete an unnecessary station
  - Change a PR channel number
  - Register a station ID
  - Add a station
  - Manually allocate a station

● The procedure is complete.
Press the TV button to exit the menu.

TROUBLESHOOTING

- If the plug is disconnected from the AC socket, or the TV aerial has problems, you may think there is a problem with the TV itself. Be sure to check the following before calling for service.

IMPORTANT
- Review all instructions in this manual.

	Problem	Action
■ GENERAL	No power supply.	Insert the plug in an AC socket. Press the Main power button (see page 6).
	No picture or sound.	Check aerial connections (see page 4). Press the number 0 button to select the correct mode (see page 10). Select the correct colour system manually (see page 12).
	The power shuts off automatically.	Press the Standby button to turn the power on again (see page 6)
	Inoperable remote control.	Replace the batteries (see page 2). Insert the batteries correctly (see page 2). Use the remote control within about 7 metres of the TV.
	MENU can not be displayed.	Are you watching the Teletext screen? None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.
■ PICTURE	Poor colour.	Adjust COLOUR and BRIGHT (see page 12). Select the correct colour system manually (see page 12).
	The screen mode suddenly changed.	The ZOOM mode's automatic selective function is working (see page 13).
	The picture is tilted. (AV-32WH3EP only)	Use the PICTURE TILT to correct the tilt (see page 14).
	Lines or streaks in picture (interference).	Move the components apart until the interference is eliminated. Reposition the aerial.
	Spots (crosstalk).	Reposition the aerial. Replace with an aerial with better directionality.
	Double pictures (ghosts).	Reposition the aerial. Replace with an aerial with better directionality.
	Snowy pictures (noise).	Check aerial connections. Redirect the aerial. Replace or repair the aerial.
	The screen turns blue.	The BLUE BACK function is on (see page 15).
■ SOUND	No sound from the TV's speakers.	Disconnect the headphones.
	No stereo sound.	Change STEREO/I•II to ꝏ mode (see page 11).
	No "SUB-I" or "SUB-II" sound in a multisound broadcast.	Change STEREO/I•II to the correct mode (see page 11).
■ TELETEXT	No teletext reception.	Tune to a teletext broadcast channel (see page 17). We recommend that you can not view videotape teletext, as it may not be recorded correctly.
	The current time is not displayed.	Tune to a teletext broadcast channel (see page 15).

The following are normal and are NOT malfunctions:
- When you touch the CRT surface, you might feel a slight charge of static electricity. This is because the CRT contains static electricity; it does not affect the human body.
- The TV may emit a crackling sound due to a sudden change in temperature. There is no problem unless the picture or sound is abnormal.
- When a still, bright image (of a white dress, for example) appears on the screen, the image may be coloured. This problem occurs in all CRTs, and as the bright image disappears, such colouration also disappears.
- This TV is equipped with a microcomputer that may operate abnormally due to interference from external components. If this happens, turn off the main power and disconnect the power cord from the AC socket. Then reconnect the power cord to AC socket and turn on the main power again.

CHANNEL TABLE

- The following table shows the relationship between the displayed CH/CC channel number and the actual channel number.
- The actual channel numbers for the "CC" channel numbers from CC110 to CC161 differ depending on the cable TV station. Check which actual channel numbers correspond to which "CC" channels while referring to the broadcast frequencies which are indicated in the channel tables of each cable TV station. If you can not find the broadcast frequency for a channel, contact the cable TV station.

CH	Channel	CH	Channel	CC	Channel	CC	Channel
CH 02 / CH 202	E2	CH 40 / CH 240	E40	CC 01 / CC 201	S1	CC 31 / CC 231	S31
CH 03 / CH 203	E3, ITALY A	CH 41 / CH 241	E41	CC 02 / CC 202	S2	CC 32 / CC 232	S32
CH 04 / CH 204	E4, ITALY B	CH 42 / CH 242	E42	CC 03 / CC 203	S3	CC 33 / CC 233	S33
CH 05 / CH 205	E5, ITALY D	CH 43 / CH 243	E43	CC 04 / CC 204	S4	CC 34 / CC 234	S34
CH 06 / CH 206	E6, ITALY E	CH 44 / CH 244	E44	CC 05 / CC 205	S5	CC 35 / CC 235	S35
CH 07 / CH 207	E7, ITALY F	CH 45 / CH 245	E45	CC 06 / CC 206	S6	CC 36 / CC 236	S36
CH 08 / CH 208	E8	CH 46 / CH 246	E46	CC 07 / CC 207	S7	CC 37 / CC 237	S37
CH 09 / CH 209	E9, ITALY G	CH 47 / CH 247	E47	CC 08 / CC 208	S8	CC 38 / CC 238	S38
CH 10 / CH 210	E10, ITALY H	CH 48 / CH 248	E48	CC 09 / CC 209	S9	CC 39 / CC 239	S39
CH 11 / CH 211	E11, ITALY H+1	CH 49 / CH 249	E49	CC 10 / CC 210	S10	CC 40 / CC 240	S40
CH 12 / CH 212	E12, ITALY H+2	CH 50 / CH 250	E50	CC 11 / CC 211	S11	CC 41 / CC 241	S41
CH 21 / CH 221	E21	CH 51 / CH 251	E51	CC 12 / CC 212	S12	CC 75 / CC 275	X
CH 22 / CH 222	E22	CH 52 / CH 252	E52	CC 13 / CC 213	S13	CC 76 / CC 276	Y
CH 23 / CH 223	E23	CH 53 / CH 253	E53	CC 14 / CC 214	S14	CC 77 / CC 277	Z, ITALY C
CH 24 / CH 224	E24	CH 54 / CH 254	E54	CC 15 / CC 215	S15	CC 78 / CC 278	Z+1
CH 25 / CH 225	E25	CH 55 / CH 255	E55	CC 16 / CC 216	S16	CC 79 / CC 279	Z+2
CH 26 / CH 226	E26	CH 56 / CH 256	E56	CC 17 / CC 217	S17		
CH 27 / CH 227	E27	CH 57 / CH 257	E57	CC 18 / CC 218	S18		
CH 28 / CH 228	E28	CH 58 / CH 258	E58	CC 19 / CC 219	S19		
CH 29 / CH 229	E29	CH 59 / CH 259	E59	CC 20 / CC 220	S20		
CH 30 / CH 230	E30	CH 60 / CH 260	E60	CC 21 / CC 221	S21		
CH 31 / CH 231	E31	CH 61 / CH 261	E61	CC 22 / CC 222	S22		
CH 32 / CH 232	E32	CH 62 / CH 262	E62	CC 23 / CC 223	S23		
CH 33 / CH 233	E33	CH 63 / CH 263	E63	CC 24 / CC 224	S24		
CH 34 / CH 234	E34	CH 64 / CH 264	E64	CC 25 / CC 225	S25		
CH 35 / CH 235	E35	CH 65 / CH 265	E65	CC 26 / CC 226	S26		
CH 36 / CH 236	E36	CH 66 / CH 266	E66	CC 27 / CC 227	S27		
CH 37 / CH 237	E37	CH 67 / CH 267	E67	CC 28 / CC 228	S28		
CH 38 / CH 238	E38	CH 68 / CH 268	E68	CC 29 / CC 229	S29		
CH 39 / CH 239	E39	CH 69 / CH 269	E69	CC 30 / CC 230	S30		

(Continued to the next page)

CHANNEL TABLE

CH	Channel	CH	Channel	CC	Frequency (MHz)	CC	Frequency (MHz)
CH 102	F2	CH 141	F41	CC 110	116 - 124	CC 151	383 - 391
CH 103	F3	CH 142	F42	CC 111	124 - 132	CC 152	391 - 399
CH 104	F4	CH 143	F43	CC 112	132 - 140	CC 153	399 - 407
CH 105	F5	CH 144	F44	CC 113	140 - 148	CC 154	407 - 415
CH 106	F6	CH 145	F45	CC 114	148 - 156	CC 155	415 - 423
CH 107	F7	CH 146	F46	CC 115	156 - 164	CC 156	423 - 431
CH 108	F8	CH 147	F47	CC 116	164 - 172	CC 157	431 - 439
CH 109	F9	CH 148	F48	CC 123	220 - 228	CC 158	439 - 447
CH 110	F10	CH 149	F49	CC 124	228 - 236	CC 159	447 - 455
CH 121	F21	CH 150	F50	CC 125	236 - 244	CC 160	455 - 463
CH 122	F22	CH 151	F51	CC 126	244 - 252	CC 161	463 - 469
CH 123	F23	CH 152	F52	CC 127	252 - 260		
CH 124	F24	CH 153	F53	CC 128	260 - 268		
CH 125	F25	CH 154	F54	CC 129	268 - 276		
CH 126	F26	CH 155	F55	CC 130	276 - 284		
CH 127	F27	CH 156	F56	CC 131	284 - 292		
CH 128	F28	CH 157	F57	CC 132	292 - 300		
CH 129	F29	CH 158	F58	CC 133	300 - 306		
CH 130	F30	CH 159	F59	CC 141	306 - 311		
CH 131	F31	CH 160	F60	CC 142	311 - 319		
CH 132	F32	CH 161	F61	CC 143	319 - 327		
CH 133	F33	CH 162	F62	CC 144	327 - 335		
CH 134	F34	CH 163	F63	CC 145	335 - 343		
CH 135	F35	CH 164	F64	CC 146	343 - 351		
CH 136	F36	CH 165	F65	CC 147	351 - 359		
CH 137	F37	CH 166	F66	CC 148	359 - 367		
CH 138	F38	CH 167	F67	CC 149	367 - 375		
CH 139	F39	CH 168	F68	CC 150	375 - 383		
CH 140	F40	CH 169	F69				

SPECIFICATIONS

Model Item	AV-32WH3EP	AV-28WH3EP
TV RF systems	CCIR L, B/G, I	
Colour systems	PAL, SECAM (NTSC 3.58 / 4.43 MHz only in EXT modes)	
Channels and frequencies	E2-E12, E21-E69, F2-F10, F21-F69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2 • French cable TV channels of broadcast frequencies 116–172 MHz or 220–469 MHz.	
Sound-multiplex systems	A2/NICAM (B/G, L) system	
Teletext systems	Fastext (United Kingdom system) / TOP (German system) / WST (standard system)	
Power requirements	AC 220 – 240 V, 50 Hz	
Power consumption	Maximum 200 W, Average 139 W, Standby 0.9 W	Maximum 194 W, Average 136 W, Standby 0.9 W
Picture tube size	Visible area 76 cm (measured diagonally)	Visible area 66 cm (measured diagonally)
Audio output	Rated Power output 10 W + 10 W	
Speakers	10 cm round x 2	
External input / output	EXT-1, EXT-2 21-pin Euroconnector (SCART)	
	EXT-3 VIDEO IN (RCA) AUDIO L / R IN (RCA) S-VIDEO IN (Mini Din 4-pin)	
	Headphone jack (stereo mini jack, dia. 3.5 mm)	
Dimensions (W x H x D)	805 mm x 550 mm x 550 mm	716 mm x 489 mm x 496 mm
Weight	48.2 kg	34.7 kg
Accessories	Remote control unit RM-C795 x 1 AAA (R03) dry cell battery x 2	

Design and specifications subject to change without notice.

Pictures displayed on the screen using this TV's image-processing functions should not be shown for any commercial or demonstration purpose in public places (tearooms and halls in hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this constitutes an infringement of copyright.

VICTOR COMPANY OF JAPAN, LIMITED

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⊕) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

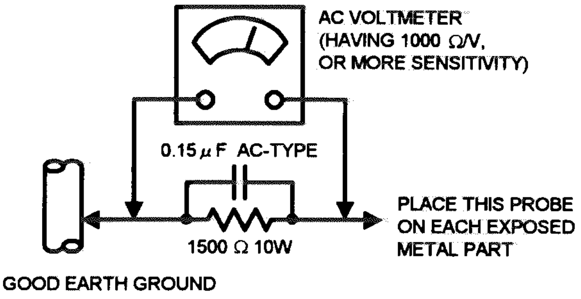
9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

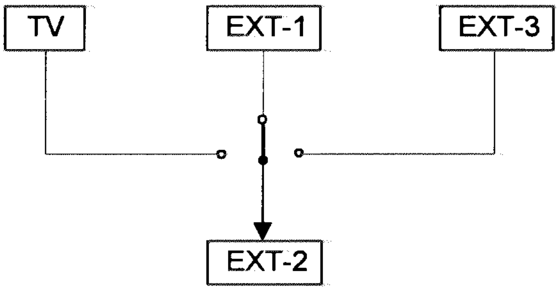
- **Alternate Check Method**

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

- By preference, users can select the picture size from REGULAR, PANORAMIC, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUBTITLE, FULL modes. When the TV unit received WSS picture signal, the picture can be changed to 16:9 mode automatically.
- The TELETEXT SYSTEM has a built-in Fastext, TOP and WST system.
- Because this TV unit corresponds to multiplex broadcast, users can enjoy music programs and sporting events with live realism. In addition, BILINGUAL programs can be heard in their original language.
- In accordance with the brightness in a room, the brightness and/or contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
- Users can make VTR dubbing of picture and sound by controlling the AV selector to select an optional source at the EXT-2 output shown in figure.



MAIN DIFFERENCE PARTS LIST

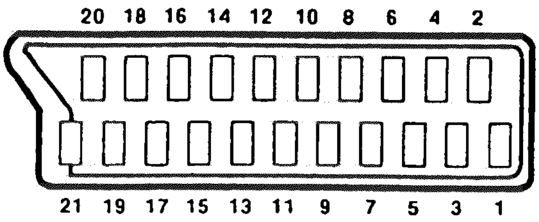
⚠	Model Name Parts Name	AV-32WH3EP	AV-28WH3EP
	MAIN PWB ASS'Y	SMC-1003A-U2	SMC-1004A-U2
	POWER DEF ASS'Y	SMC-2002A-U2	SMC-2003A-U2
	CRT SOCKET PWB ASS'Y	SMC-3002A-U2	SMC-3003A-U2
	CONTROL BASE	CM12925-B01-E	CM12925-B03-E
	CONTROL BASE	CM12925-A02-E	CM12925-A04-E
	CONNECTOR ASS'Y	CHGA04-5400-G	WJJ0010-002A
	FFC WIRE	CHGB119-10BD	CHFB119-06BD
⚠	**CRT**	W76ESF031X44	W66ESF002X44
⚠	**DEG COIL**	CELD062-001J2	CELD061-001J2
	ROTATION COIL	CELD904-001	×
	BRAIDED ASS'Y	CHGB0029-0C	CHGB0029-0B
	FRONT CABNET	CM12587-A0R-E	CM12833-A0F-E
⚠	**HVT (SERVICE)**	CETH021-00AJ1	CETH020-00AJ1
⚠	**REAR COVER**	CM12737-003-E	CM12582-A04-E
⚠	**RATING LABEL**	LC20092-004A-U LC20093-004A-U	LC20092-005A-U LC20093-005A-U
	EURO LABEL	AEM1038-089-E	AEM1038-090-E
	X-RAY CARD	LC10102-003A-U	LC10102-004A-U

■21-pin Euro connector (SCART socket) : EXT-1 / EXT-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT-1	EXT-2
1	AUDIO R output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (LINE OUT)
2	AUDIO R input	500mVrms(Nominal), High impedance	○	○
3	AUDIO L output	500mVrms(Nominal), Low impedance	○ (TV OUT)	○ (LINE OUT)
4	AUDIO GND		○	○
5	GND (B)		○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○
7	B input	700mV$_{B-W}$, 75Ω	○	NC
8	FUNCTON SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	○
9	GND (G)		○	○
10	–		NC	–
10	SCL3		–	○
11	G input	700mV$_{B-W}$, 75Ω	○	NC
12	–		NC	–
12	SDA3		–	○
13	GND (R)		○	○
14	GND (Y_S)		○	NC
15	R / C input	R : 700mV$_{B-W}$, 75Ω C : 300mV$_{P-P}$, 75Ω	○	○ (only C)
16	Ys input	Low : 0 - 0.4, High : 1 - 3V, 75Ω	○	NC
17	GND(VIDEO output)		○	○
18	GND(VIDEO input)		○	○
19	VIDEO output	1V$_{S-W}$(Negative going sync), 75Ω	○ (TV)	○ (LINE OUT)
20	VIDEO / Y input	1V$_{S-W}$(Negative going sync), 75Ω	○	○
21	COMMON GND		○	○

[Pin assignment]



SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 13 screws marked Ⓐ as shown in Fig. 1.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
2. Withdraw the chassis backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERMINAL PWB & THE AV TERMINAL BASE

- After removing the rear cover.

1. Remove the 3 screws marked Ⓑ as shown in Fig. 1.
2. While raising the claw marked Ⓒ , remove the top of the AV TERMINAL BASE slightly in the direction of arrow Ⓓ as shown in Fig. 2.

REMOVING THE SPEAKER

- After removing the rear cover.

1. Remove the 4 screws marked Ⓔ as shown in Fig. 1.
2. Follow the same steps when removing the other hand speaker.

REMOVING THE DOME SPEAKER BOX

- After removing the rear cover.

1. Remove the 2 screws marked Ⓕ as shown in Fig. 1.
2. Follow the same steps when removing the other hand DOME SPEAKER BOX.

NOTE : When removing the screws marked Ⓕ of the DOME SPEAKER BOX, remove the upper screw.

REMOVING THE CONTROL BASE

- After removing the CHASSIS.

1. While pushing down the claws marked Ⓖ , remove the CONTROL BASE in the arrow direction Ⓗ as shown in Fig. 3.

REMOVING THE TRANSF. HOLDER.

- After removing the CHASSIS.

1. Remove the 3 screws marked Ⓘ as shown in Fig. 1.

CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.

Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

**This exploded view describes about AV-32WH3EP.
Although AV-28WH3EP is slightly different from this figure, you can use the exploded view for disassembling the AV-28WH3EP in the same step as for the AV-32WH3EP.**

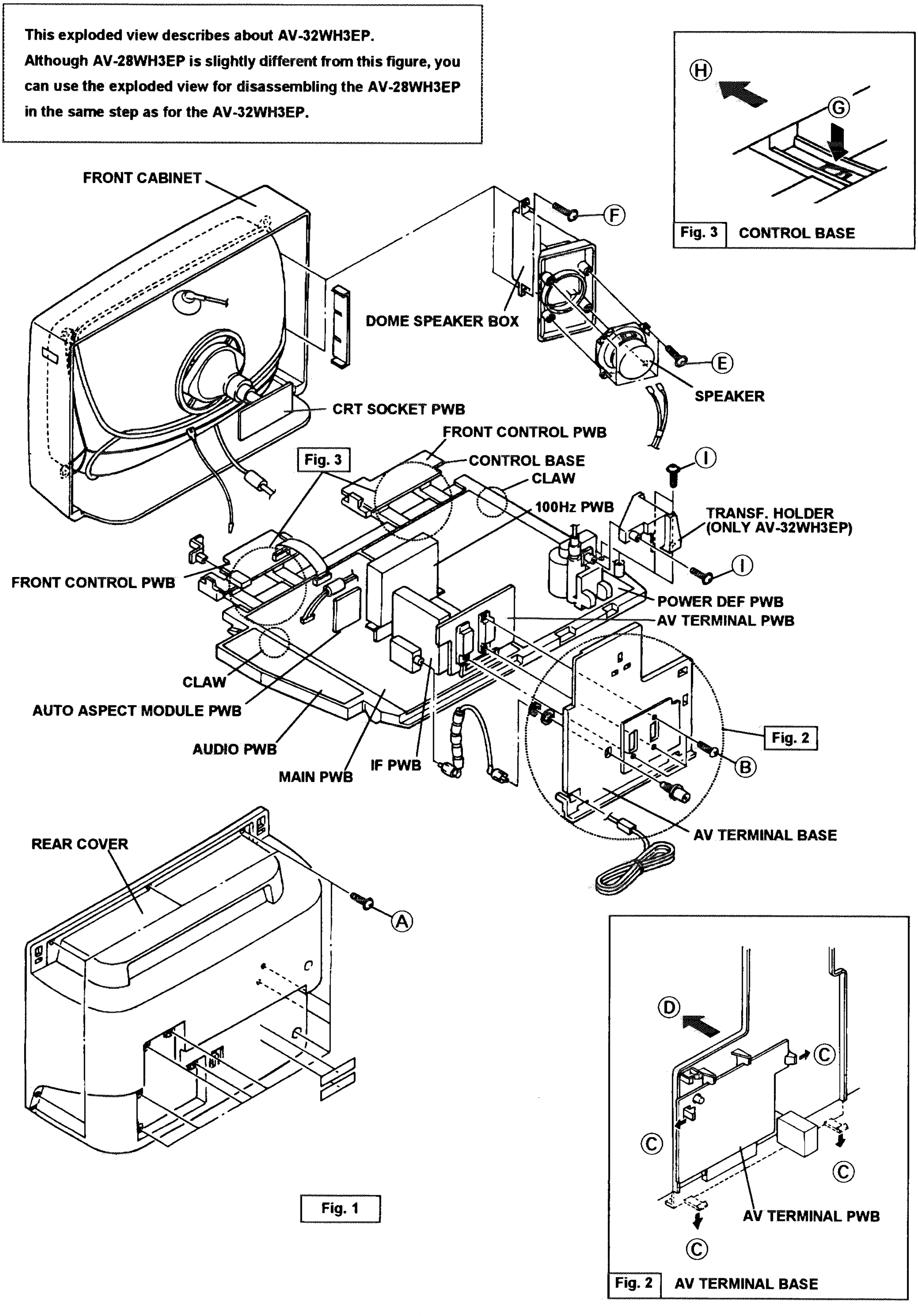

Ⓗ
Ⓖ
FRONT CABINET
Ⓕ
DOME SPEAKER BOX
Ⓔ
SPEAKER
CRT SOCKET PWB
FRONT CONTROL PWB
Fig. 3
CONTROL BASE
CLAW
Ⓘ
100Hz PWB
TRANSF. HOLDER
(ONLY AV-32WH3EP)
Ⓘ
FRONT CONTROL PWB
POWER DEF PWB
AV TERMINAL PWB
CLAW
AUTO ASPECT MODULE PWB
Fig. 2
Ⓑ
AUDIO PWB
IF PWB
MAIN PWB
AV TERMINAL BASE
REAR COVER
Ⓐ
Ⓓ
Ⓒ
Ⓒ
Ⓒ
Ⓒ
AV TERMINAL PWB
Ⓒ

Fig. 3 CONTROL BASE

Fig. 1

Fig. 2 AV TERMINAL BASE

REMOVING THE CRT

- * Replacement of the CRT should be performed by 2 or more persons.
- After removing the cover, chassis etc..,

1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.4).
2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.5.
3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.5.

- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.6.

- The CRT should be assembled according to the opposite sequence of its dismounting steps.
- * The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

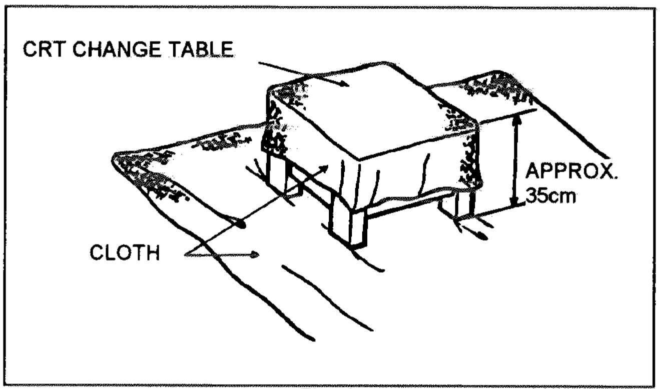

CRT CHANGE TABLE
APPROX. 35cm
CLOTH

Fig. 4

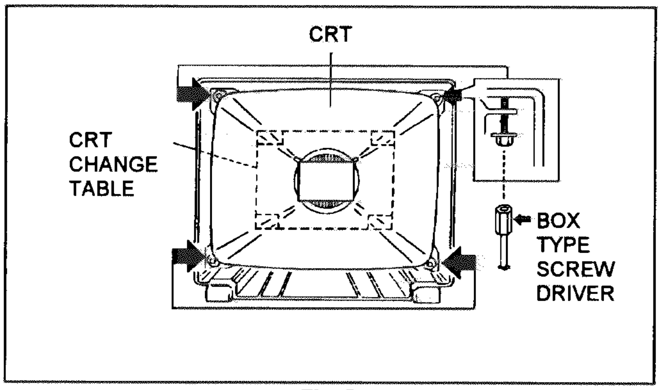

CRT
CRT CHANGE TABLE
BOX TYPE SCREW DRIVER

Fig. 5

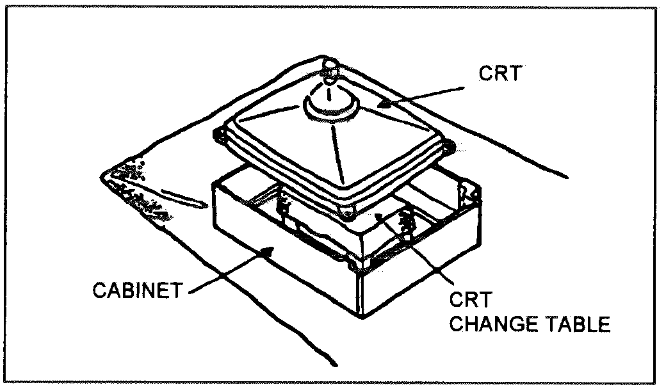

CRT
CABINET
CRT CHANGE TABLE

Fig. 6

COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.7.
  Wipe around the anode button with clean and dry cloth. (Fig.7)
  Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not stick to the anode button. (Fig.8)

★ **Silicon grease product No. KS - 650N**

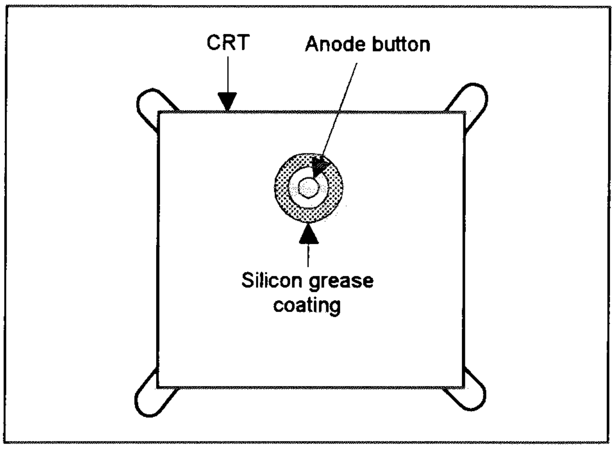

CRT
Anode button
Silicon grease coating

Fig. 7

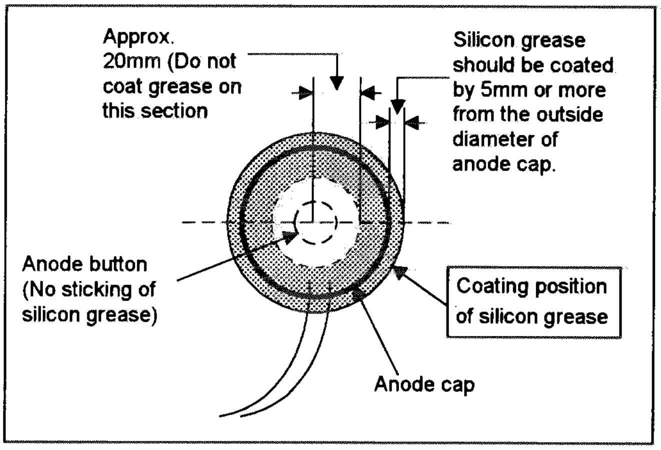

Approx. 20mm (Do not coat grease on this section
Silicon grease should be coated by 5mm or more from the outside diameter of anode cap.
Anode button (No sticking of silicon grease)
Coating position of silicon grease
Anode cap

Fig. 8

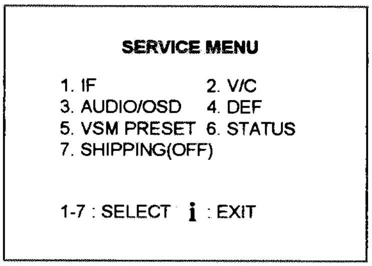
REPLACEMENT OF MEMORY ICs

1. Memory ICs

This TV use memory ICs. In the memory ICs, there are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. Procedure for replacing memory ICs

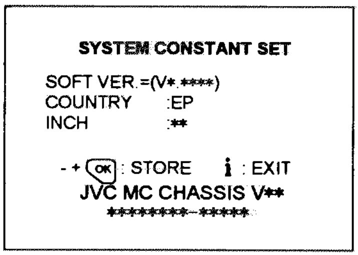
PROCEDURE
(1) **Power off** Switch the power off and unplug the power code from the outlet.
(2) **Replace ICs.** Be sure to use memory ICs written with the initial data values.
(3) **Power on** Plug the power code into the outlet and switch the power on.
(4) **Check and set SYSTEM CONSTANT SET:** 1) Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously. 2) The SERVICE MENU screen of Fig. 1 will be displayed. 3) While the SERVICE MENU is displayed, press the INFORMATION key and MUTING key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed. 4) Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION -/+ key. 5) Press the MENU key to memorize the setting value. 6) Press the INFORMATION key twice, and return to the normal screen.
(5) **Setting of receive channels** Set the receive channel. For setting, refer to the OPERATING INSTRUCTIONS.
(6) **User settings** Check the user setting values of Table 2, and if setting value is different, set the correct value. For setting, refer to the OPERATING INSTRUCTIONS.
(7) **Setting of SERVICE MENU** Verify the setting items of the **SERVICE MENU** of Table 3, and reset where necessary. For setting, refer to the SERVICE ADJUSTMENTS.



SERVICE MENU
1. IF 2. V/C
3. AUDIO/OSD 4. DEF
5. VSM PRESET 6. STATUS
7. SHIPPING(OFF)

1-7 : SELECT i : EXIT

Fig.1



SYSTEM CONSTANT SET
SOFT VER.=(V*.****)
COUNTRY :EP
INCH :**

- + OK : STORE i : EXIT
JVC MC CHASSIS V**
*********-*****

Fig.2

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	ⓘ
MUTING	🔇
MENU	OK
FUNCTION UP/DOWN	▲ ▼
FUNCTION -/+	◀ ▶

SETTING VALUES OF SYSTEM CONSTANT SET (TABLE 1)

Setting item	Setting content	Setting value	
		AV-32WH3EP	AV-28WH3EP
1. COUNTRY	→ EN → EP → ER → EK ┐	EP	←
2. INCH	→ 29 → 28 → 32 ┐	32	28

USER SETTING VALUES (TABLE 2)

Setting item		Setting value	Setting item		Setting value
SUB POWER		ON	INSTALL	LANGUAGE	ENGLISH
CHANNEL		1 POSITION	EXT SOURCE	EXT SETTING	ID:NO INPUT S-IN:NO INPUT
CHANNEL PRESET		See;OPERATING INSTRUCTUONS.		DUBBING	EXT-1→EXT-2
VOLUME		Appropriate sound volume	FEATURES	SLEEP TIMER	OFF
DISPLAY		CHANNEL NUMBER DISPLAY		BLUE BACK	ON
ZOOM MODE		REGULAR		CHILD LOCK	ID NO.0000 all channel off
PICTURE FEATURE	COLOR SYSTEM	TV:depend on PR EXT:AUTO	PICTURE SETTING	TINT	COOL
	DIGITAL VNR	ON		CONTRAST	RESET
4:3 AUTO ASPECT		PANORAMIC		BRIBHT	RESET
PICTURE TILT [AV-32WH3EP]		CENTRE		SHARP	RESET
SOUND SETTING	BASS	CENTRE		COLOUR	RESET
	TREBLE	CENTRE		ECO	OFF
	BALANCE	CENTRE			
	HYPER SOUND	OFF			

SERVICE MENU SETTING ITEMS (TABLE 3)

Setting item	Setting value
1. IF	1. VCO 2. DELAY POINT 3. L.V.LEVEL
2. V / C	1. RGB BLK 2. R DRIVE 3. G DRIVE 4. B DRIVE 5. R LEVEL 6. G LEVEL 7. B LEVEL 8. BRIGHT 9. CONT. 10. COLOUR(PAL/SECAM/NTSC) 11. HUE 12. PEAK DRIVE 13. GAMMA 14. CONT LIMIT
3. AUDIO / OSD ***(Do not adjust)***	1. CONC LIMIT 2. A2 ID THR 3. TEXT MONO H
4. DEF.	1. V-SHIFT 2. V-SLOPE 3. V-SIZE 4. H-CENT 5. H-SIZE 6. EW-PIN 7. EW-COR 8. TRAPEZ 9. V-S.CR 10. EHT-COMP
5. VSM PRESET COOL NORMAL WARM	1. BRIGHT 2. CONT. 3. COLOUR 4. SHARP 5. HUE 6. R DRIVE 7. G DRIVE 8. B DRIVE 9. BASS 10. TREBLE
6. VPS ***(Do not adjust)***	VPS
7. SHIPPING ***(Do not adjust)***	ON / OFF

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.**
2. **The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
3. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before starting adjustment.
4. Make sure that connection is correctly made to AC power source.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
7. Preparation for adjustment (presetting):
   Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT:

PICTURE MODE (VSM)	COOL
SLEEP TIMER	OFF
HYPER SOUND	OFF
BALANCE	CENTER
ECO	OFF
ZOOM	FULL

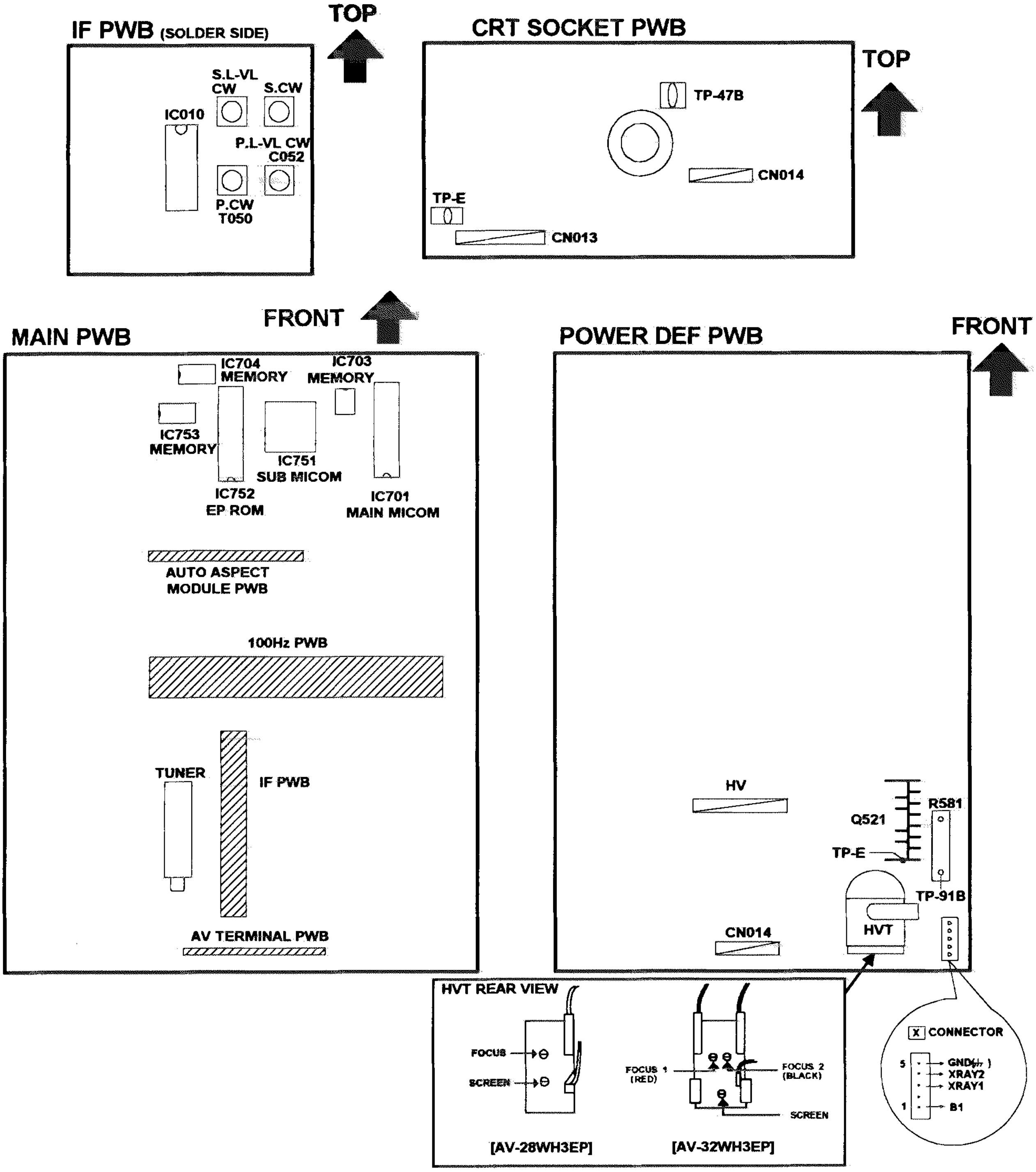
MEASUREING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

- Check of B1 Power supply.
- Adjustment of FOCUS.
- IF circuit adjustment.
- VSM preset adjust setting.
- VIDEO / CHROMA circuit adjustment.
- DEFLECTION circuit adjustment.
- AUDIO circuit adjustment. (Do not adjust)
- OSD horizontal position.

ADJUSTMENT LOCATION


IF PWB (SOLDER SIDE)
TOP
S.L-VL CW
S.CW
IC010
P.L-VL CW
C052
P.CW
T050
CRT SOCKET PWB
TOP
TP-47B
CN014
TP-E
CN013
MAIN PWB
FRONT
IC704 MEMORY
IC703 MEMORY
IC753 MEMORY
IC751 SUB MICOM
IC752 EP ROM
IC701 MAIN MICOM
AUTO ASPECT MODULE PWB
100Hz PWB
TUNER
IF PWB
AV TERMINAL PWB
POWER DEF PWB
FRONT
HV
Q521
R581
TP-E
TP-91B
CN014
HVT
HVT REAR VIEW
FOCUS
SCREEN
FOCUS 1 (RED)
FOCUS 2 (BLACK)
SCREEN
[AV-28WH3EP]
[AV-32WH3EP]
X CONNECTOR
5
1
GND(⏚)
XRAY2
XRAY1
B1

BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings (adjustments):

(1) **1. IF** ························ This mode adjusts the setting values of the IF circuit.
(2) **2.V/C** ························ This mode adjusts the setting values of the VIDEO / CHROMA circuit.
(3) **3.AUDIO/OSD** ·············· This mode adjusts the setting values of the multiplicity SOUND circuit.
(4) **4.DEF** ························ This mode adjusts the setting values of the DEFLECTION circuit for each aspect mode given below.
- FULL (100/120Hz)
- PANORAMIC (100/120Hz)
- 16:9 ZOOM SUBTITLE (100/120Hz)

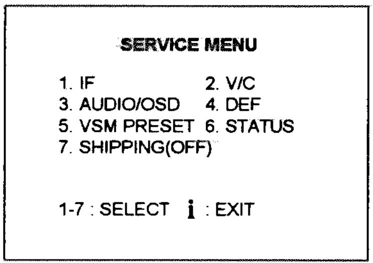
(5) **5.VSM PRSET** ·············· This mode adjusts the initial setting values of COOL,NORMAL and WARM.
(VSM : Video Status Memory)
(6) **6.STATUS** ···················· This mode shows the monitor of the VPS and PDC.***(Do not adjust)***.
(VPS : Video Program System, PDC : Program Delivery Code)
(7) **7.SHIPPING** ················ This mode sets the INITIAL SETTING VALUE. ***(Do not adjust)***

3. BASIC OPERATION OF SERVICE MENU

(1) How to enter SERVICE MENU

Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig. 1 will be displayed.

SERVICE MENU



SERVICE MENU

1. IF 2. V/C
3. AUDIO/OSD 4. DEF
5. VSM PRESET 6. STATUS
7. SHIPPING(OFF)

1-7 : SELECT i : EXIT

Fig.1

(2) Selection of SUB MENU SCREEN

Press one of keys 1~7 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3), form the SERVICE MENU.

SERVICE MENU → SUB MENU

1. IF
2. V / C
3. AUDIO/OSD
4. DEF.
5. VSM PRESET
6. STATUS
7. SHIPPING

NEME OF REMOTE CONTOROL KEY

Names of key	key
INFORMATION	ⓘ
MUTEING	🔇
MENU	OK
FUNCTION UP/DOWN	▲ ▼
FUNCTION -/+	◄ ►

Fig.2

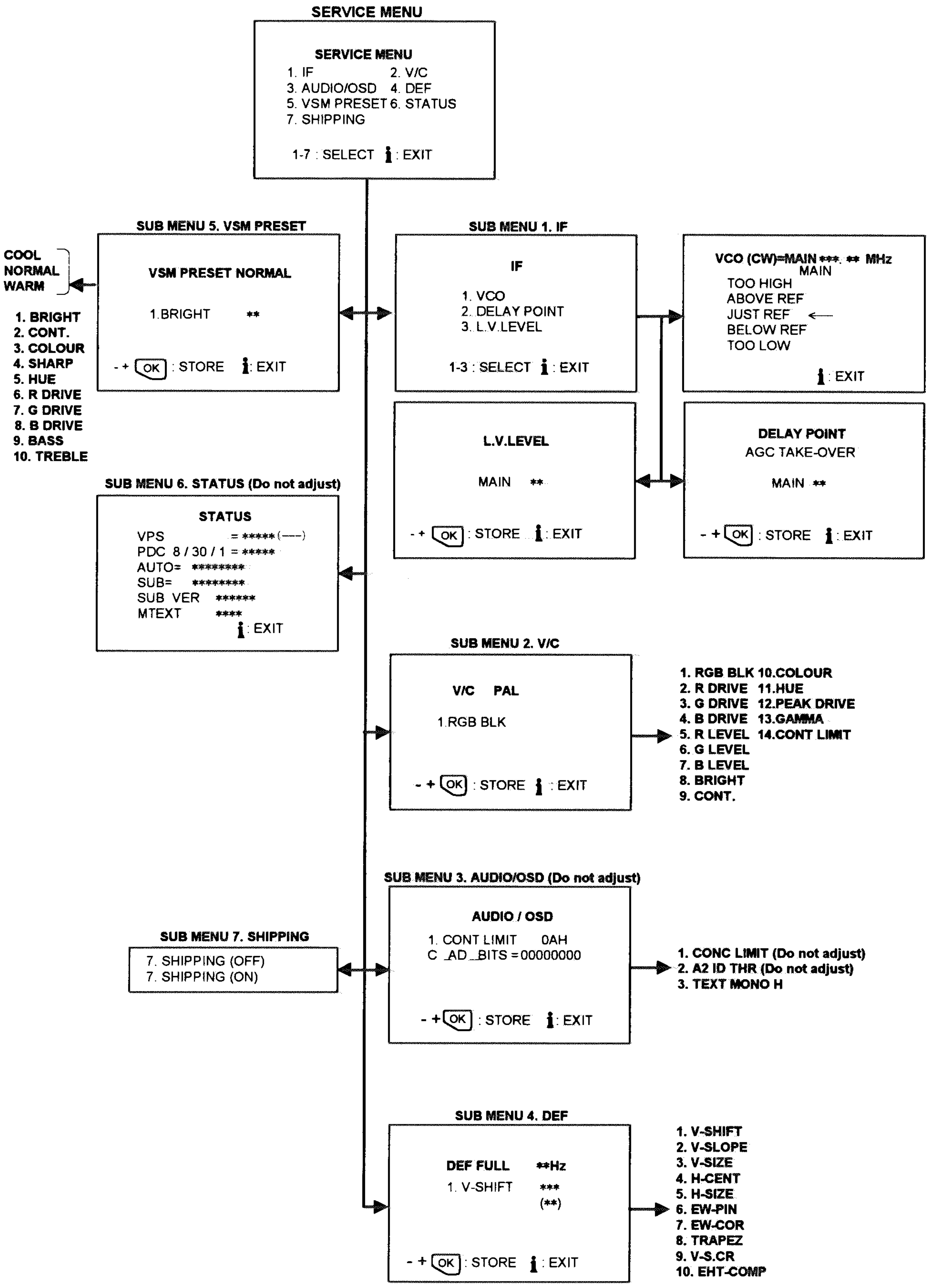

SERVICE MENU
SERVICE MENU
1. IF 2. V/C
3. AUDIO/OSD 4. DEF
5. VSM PRESET 6. STATUS
7. SHIPPING
1-7 : SELECT ℹ : EXIT
SUB MENU 5. VSM PRESET
COOL
NORMAL
WARM
VSM PRESET NORMAL
1.BRIGHT **
- + OK : STORE ℹ: EXIT
1. BRIGHT
2. CONT.
3. COLOUR
4. SHARP
5. HUE
6. R DRIVE
7. G DRIVE
8. B DRIVE
9. BASS
10. TREBLE
SUB MENU 1. IF
IF
1. VCO
2. DELAY POINT
3. L.V.LEVEL
1-3 : SELECT ℹ : EXIT
VCO (CW)=MAIN ***. ** MHz
MAIN
TOO HIGH
ABOVE REF
JUST REF ←
BELOW REF
TOO LOW
ℹ : EXIT
L.V.LEVEL
MAIN **
- + OK : STORE ℹ : EXIT
DELAY POINT
AGC TAKE-OVER
MAIN **
- + OK : STORE ℹ : EXIT
SUB MENU 6. STATUS (Do not adjust)
STATUS
VPS = *****(---)
PDC 8 / 30 / 1 = *****
AUTO= ********
SUB= ********
SUB VER ******
MTEXT ****
ℹ: EXIT
SUB MENU 2. V/C
V/C PAL
1.RGB BLK
- + OK : STORE ℹ : EXIT
1. RGB BLK
2. R DRIVE
3. G DRIVE
4. B DRIVE
5. R LEVEL
6. G LEVEL
7. B LEVEL
8. BRIGHT
9. CONT.
10.COLOUR
11.HUE
12.PEAK DRIVE
13.GAMMA
14.CONT LIMIT
SUB MENU 3. AUDIO/OSD (Do not adjust)
AUDIO / OSD
1. CONT LIMIT 0AH
C_AD_BITS =00000000
- + OK : STORE ℹ: EXIT
1. CONC LIMIT (Do not adjust)
2. A2 ID THR (Do not adjust)
3. TEXT MONO H
SUB MENU 7. SHIPPING
7. SHIPPING (OFF)
7. SHIPPING (ON)
SUB MENU 4. DEF
DEF FULL **Hz
1. V-SHIFT ***
(**)
- + OK : STORE ℹ : EXIT
1. V-SHIFT
2. V-SLOPE
3. V-SIZE
4. H-CENT
5. H-SIZE
6. EW-PIN
7. EW-COR
8. TRAPEZ
9. V-S.CR
10. EHT-COMP

Fig. 3 SUB MENU SCREEN

(3) **Method of Setting**

1) Method of Setting **1.IF**

[1. VCO]

① 1 Key ························· Select **1.IF**.
② 1 Key ························· Select **1.VCO**
③ The VCO (CW) screen will be displayed in yellow and a allow mark when the AFC voltage is at a certain level.
④ INFORMATION Key ············ As you press this twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ························· Select **1.IF**.
② 2 Key ························· Select **2.DELAY POINT**.
③ FUNCTION -/+ ················· Set (adjust) the setting values of the setting items.
④ MENU Key ····················· Memorize the set value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)
⑤ INFORMATION Key ············ When this is pressed twice, you will return to the SERVICE MENU.

[3. L.V.LEVEL]

① 1 Key ························· Select **1.IF**.
② 3 Key ························· Select **3.L.V.LEVEL**.
③ FUNCTION -/+ Key ············· Set (adjust) the setting values of the setting items.
④ MENU Key ····················· Memorize the set value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)
⑤ INFORMATION Key ············ When this is pressed twice, you will return to the SERVICE MENU.

2) Method of setting **2.V/C, 3.AUDIO, 4.DEF,** and **5.VSM PRESET.**

① 2~5 Key ······················ Select one from **2. V/C, 3. AUDIO, 4. DEF,** and **5. VSM PRESET**.
② FUNCTION UP/DOUN Key ······ Select setting items.
③ FUNCTION -/+ ················· Set (adjust) the setting values of the setting items.
(When 1.RGB BLK of 2.V/C is selected, press the FUNCTION-/+ key, and the whole will change to a black picture. Press the FUNCTION-/+ or 2 key, and the screen will return to the original screen.)
④ MENU Key ····················· Memorize the setting value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key - if you do, the values will not be stored in memory.)
⑤ INFOMATION Key ·············· Return to the **SERVICE MENU** screen.

3) Method of setting **6.STATUS** and **7.SHIPPING**.

6.STATUS **(Do not adjust)** ········· This mode displayed monitor of VPS, PDC systems.
7.SHIPPING **(Do not adjust)** ······· This mode is set the initial setting value at the time of shipment, you need not to use it for service.

(4) **Release of SERVICE MENU**

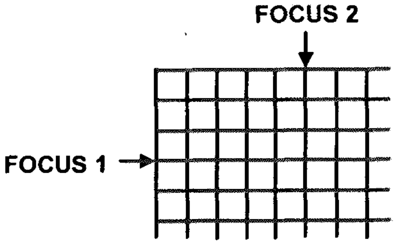
1) After completing the setting, return to the SERVICE MENU, then again press the INFORMATION key.

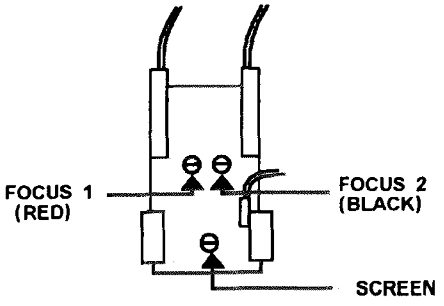
B1 POWER SUPPLY CHECK

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power supply	**Signal generator** **DC voltmeter**	**TP-91(B1)** **TP-E(GND ⏚)** **[X connector on POWER DEF PWB]**		1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E(GND ⏚). 3. Make sure that the voltage is DC141.4±2.0V.

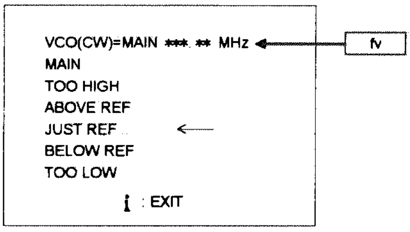
FOCUS ADJUSTMENT

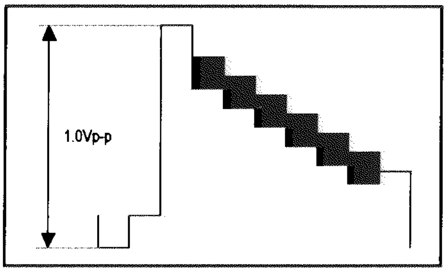
Item	Measuring instrument	Test point	Adjustment part	Description
[AV-28WH3EP] **Adjustment of FOCUS**	**Signal generator**		**FOCUS VR** **[In HVT]**	1. Receive a cross-hatch signal. Select FULL mode. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.
[AV-32WH3EP] **Adjustment of FOCUS**	**Signal generator**		**FOCUS 1 (Red)** **FOCUS 2 (Black)** **[In HVT]**	1. Receive a cross-hatch signal. Select FULL mode. 2. By turning the black VR FOCUS 2, adjust the picture so that the 5th vertical line from the left side of the cross-hatch picture becomes thinnest. 3. By turning the red VR FOCUS 1, adjust the picture so that the 3rd horizontal line from the upper side of the cross-hatch picture becomes uniform at the line center and its periphery. 4. Carry out adjustment by repeating the steps 2 and 3 above. 5. Make sure that when the screen is darkened, the lines remain in good focus.





IF CIRCUIT ADJUSTMENT

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of VCO</td><td>Remote control unit</td><td></td><td>P. CW TRANSF. (T050)
P.L-VL CW TRIM. C [On IF PWB]</td><td rowspan="2">● Do not make any adjustment unless the adjustment is out of way and you cannot get correct PICTURE.
1. Select 1.IF from the SERVICE MENU.
2. Press 1 key and select 1.VCO.
3. Select a SECAM L or PAL broadcast channel with the CHANNEL key.
4. Turn the core of P. CW TRANSF. until the arrow mark (←) on the screen points TOO HIGH (Step 1).
5. Turn the core of P. CW TRANSF. until the arrow mark (←) on the screen points TOO LOW (Step 2).
6. Then slowly turn back the core of P. CW TRANSF. until the arrow mark (←) on the screen points JUST REF (Step 3).
7. In the district where SECAM L's broadcast, can be received, select a SECAM L's broadcast channel with the CHANNEL key and adjust the P.L-VL CW TRIM.C in the same manner as for above steps. And readjust P.CW TRANSF., if necessary.
8. Press the INFORMATION key three times to return to normal screen.
9. Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.</td></tr>
<tr><td colspan="4">
VCO(CW)=MAIN ***.** MHz ← fv
MAIN
TOO HIGH
ABOVE REF
JUST REF ←
BELOW REF
TOO LOW
i : EXIT

<table>
<tr><th rowspan="2">Screen display</th><th colspan="3">Step</th></tr>
<tr><th>1</th><th>2</th><th>3</th></tr>
<tr><td>TOO HIGH</td><td>←</td><td></td><td></td></tr>
<tr><td>ABOVE REFERENCE</td><td></td><td></td><td></td></tr>
<tr><td>JUST REFERENCE</td><td></td><td></td><td>←</td></tr>
<tr><td>BELOW REFERENCE</td><td></td><td></td><td></td></tr>
<tr><td>TOO LOW</td><td></td><td>←</td><td></td></tr>
</table></td></tr>
<tr><td>Adjustment of DELAY POINT</td><td>Remote control unit</td><td></td><td>DELAY POINT (AGC TAKE-OVER)</td><td rowspan="2">1. Receive a black and white signal (colour off).
2. Select 1.IF from the SERVICE MENU.
3. Select 2.DELAY POINT by pressing the 2 key on the remote control.
4. Adjust the FUNCTION - or + key until video noise disappears.
5. Press the MENU key and memorize the set value.
6. Turn to other channels and make sure that there are no irregularities.</td></tr>
<tr><td colspan="4">
<table>
<tr><th>Setting item (Adjustment item)</th><th>Variable range</th><th>Initial setting value</th></tr>
<tr><td>DELAY POINT (AGC TAKE-OVER)</td><td>0~63</td><td>35</td></tr>
</table></td></tr>
<tr><td>Adjustment of L-DET. LEVEL</td><td>Signel generator
Oscilloscope [H-rate]
Remote control unit</td><td>EXT-1 ⑲pin (TV OUT)</td><td></td><td rowspan="2">1. Receive a SECAM-L full field colour bar signal (100% white).
2. Connect an oscilloscope terminated 75Ω to EXT-1 terminal of ⑲pin (TV out).
3. Select 1. IF from the SERVICE MENU.
4. Press 3 key and select 3.LV LEVEL.
5. Adjust the LV LEVEL by FUNCTION -/+ key and make the wave detector output 1.0Vp-p.
6. Press the MENU key and memorize the set value.</td></tr>
<tr><td colspan="4"> </td></tr>
</table>

VSM PRESET SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET ADJUST	**Remote control unit**		**1. BRIGHT** **2. CONT.** **3. COLOUR** **4. SHARP** **5. HUE** **6. R DRIVE** **7. G DRIVE** **8. B DRIVE** **9. BASS** **10. TREBLE**	1. Select COOL with the MENU key of the remote control unit. 2. Select 5.VSM PRESET from the SERVICE MENU. 3. Adjust the FUNCTION UP/DOWN and -/+ key to bring the set values of 1.BRIGHT ~ 10.TREBLE to the values shown in the table. 4. Press the MENU key and memorize the set value. 5. Respectively select the VSM PRESET mode for NORMAL and WARM, and make similar adjustment as in 3 above. 6. Press the MENU key and memorize the set value. * Refer to OPERATING INSTRUCTIONS for the PICTURE MODE.

VSM preset mode / Setting item	COOL	NORMAL	WARM
1. BRIGHT SETTING VALUE	+0	+0	+0
2. CONT. SETTING VALUE	+13	+7	+2
3. COLOUR SETTING VALUE	+2	+0	-2
4. SHARP SETTING VALUE	+0	+0	-2
5. HUE SETTING VALUE	+0	+0	+0
6. R DRIVE SETTING VALUE	-8	+0	+14
7. G DRIVE SETTING VALUE	-6	+0	+5
8. B DRIVE SETTING VALUE	+2	+0	-6
9. BASS SETTING VALUE	+0	+0	+0
10.TREBLE SETTING VALUE	+0 (Fixed)	+0 (Fixed)	+0 (Fixed)

SETTING VALUES OF VSM PRESET

VIDEO/CHROMA CIRCUIT ADJUSTMENT

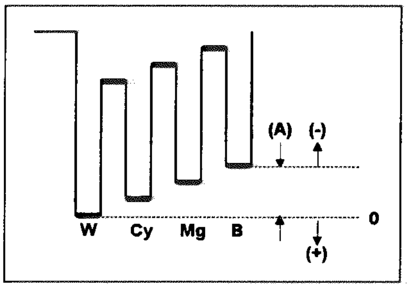
The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

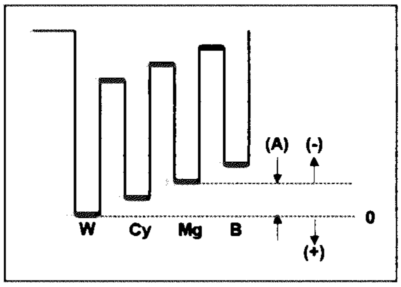
Setting Item (Adjustment Item)	Initial setting value	
	PAL / SECAM	NTSC 3.58 NTSC 4.43
1.RGB BLK	——	——
2.R.DRIVE	+12	——
3.G.DRIVE	+2	——
4.B.DRIVE (Do not ajust)	+0	——
5.R.LEVEL	+0	——
6.G.LEVEL	+0	——
7.B.LEVEL	+0	——
8.BRIGHT	-10	——
9.CONT	-5	——

Colour system Setting item	Initial setting value	
	PAL / SECAM	NTSC 3.58 NTSC 4.43
10.COLOUR	+3	+12
11.HUE	——	-2
12.PEAK DRIVE (Do not ajust)	+5	——
13.GAMMA (Do not ajust)	-21	——
14.CONT. LIMIT (Do not ajust)	NO	NO

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE	Signal generator Remote control unit		2.R DRIVE 3.G DRIVE 5.R LEVEL 6.G LEVEL 7.B LEVEL	● Set the PICTURE MODE to COOL. 1. Receive a black and white signal(colour off). 2. Select 2. V/C from the SERVICE MENU. 3. Modify 2. R DRIVE and 3.G DRIVE data to adjust the white balance (high light) 4. Modify 5. R LEVEL, 6. G LEVEL and 7. B LEVEL data to adjust the white balance of low light. Components. 5. Press the MENU key and memorize the set value.
Adjustment of SUB BRIGHT	Remote control unit		8.BRIGHT	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 8.BRIGHT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION -/+ key. 5. If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness. 6. Press the MENU key and memorize the set value.
Adjustment of SUB CONT.	Remote control unit		9.CONT.	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 9.CONT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION - or + key. 5. If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast. 6. Press the MENU key and memorize the set value.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR I	**Remote control unit**		**10.COLOUR (PAL~NTSC)**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive PAL broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 10.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the MENU key and memorize the set value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM broadcast. Make fine adjustment of SECAM COLOUR in the same manner as for above.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. 2. Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR Ⅱ	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B** **TP-E(⊥)** **[CRT SOCKET PWB]**	**10.COLOUR (PAL~NTSC)**	**[Method of adjustment using measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive a PAL full field colour bar signal(75% white). 2. Select 2.V/C from the SERVICE MENU. 3. Select 10.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value of PAL COLOUR with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust PAL COLOUR and bring the value of (A) in the illustration to -8V (voltage difference between white (w) and blue (B)). 7. Press the MENU key and memorize the setting value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM full field colour bar signal(75% white). 2. Set the initial setting value of SECAM COLOUR with the FUNCTION -/+ key. 3. Adjust SECAM COLOUR and bring the value of (A) of the illustration to -6V(W~B). 4. Press the MENU key and memorize the setting value.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION -/+ key. 3. Adjust NTSC 3.58 COLOUR and bring the value of (A) of the illustration to -2V(W~B). 4. Press the MENU key and memorize the setting value.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB HUE I	**Remote control unit**		**11.HUE**	**[Method of adjustment without measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION -/+ key. 5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint. 6. Press the MENU key and memorize the set value.
			NTSC 4.43 HUE	[NTSC 4.43 HUE] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of SUB HUE II	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B** **TP-E(⊥)** **[CRT SOCKET PWB]**	**11.HUE**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust NTSC 3.58 HUE to bring the value of (A) in the illustration to 0V (voltage difference between white (W) and magenta(Mg)). 7. Press the MENU key and memorize the setting value
			NTSC 4.43 HUE	[NTSC 4.43 HUE] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

DEFLECTION CIRCUIT ADJUSTMENT

There are 2 modes of the adjustment (1) 100Hz mode (①FULL ②PANORAMIC, ③16:9 ZOOM SUBTITLE), (2) 120Hz mode (each aspect mode) ······ depending upon the kind of signals (vertical frequency 100Hz / 120Hz).

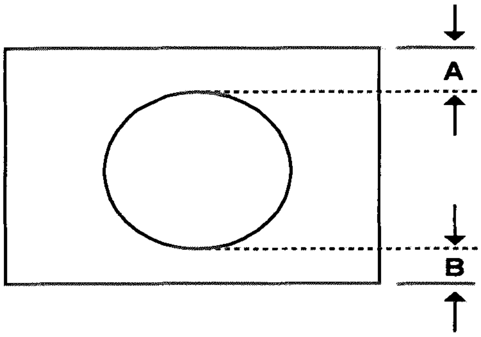
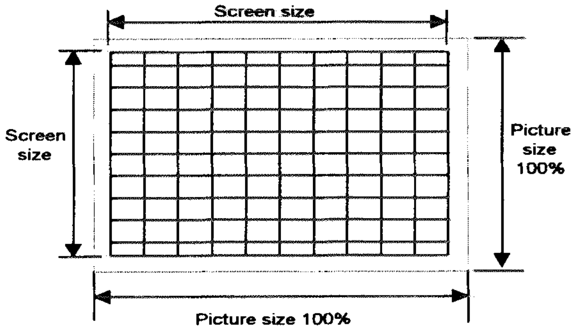
- **When the 100Hz FULL mode has been established, the setting of other modes will be done automatically. However, if the picture quality has not been optimized, adjust each mode again, respectively.**
- **The adjustment using the remote control unit is made on the basis of the initial setting values.**
- **The setting values which adjust the screen to the optimum condition can be different from the initial setting values. Regular and Zoom switching is conducted not by the Deflection circuit, but by the 100 Hz PWB. Therefore, the deflection system cannot be adjusted in these modes.**

[AV-32WH3EP]

Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		16 : 9 ZOOM SUBTITLE	
		100Hz	120Hz	100Hz	120Hz	100Hz	120Hz
1.V- SHIFT	Vertical center	3	+1	0	0	0	0
2.V- SLOPE	Vertical def. Start position	14 (Fixed)	0 (Fixed)	-4 (Fixed)	+2 (Fixed)	+1 (Fixed)	+3 (Fixed)
3.V-SIZE	Vertical height	22	-2	+11	-3	+12	-5
4.H-CENT	Horizontal center	26	-3	0	-1	0	-2
5.H-SIZE	Horizontal width	16	-1	+9	-1	0	0
6.EW-PIN	Side pin correction	38	0	+9	0	+6	-1
7.EW-COR	Side pin four corner correction	19	0	+12	+5	+6	0
8.TRAPEZ	Trapezoidal distortion correction	4 (Fixed)	0 (Fixed)	+1 (Fixed)	-1 (Fixed)	-1 (Fixed)	+1 (Fixed)
9.V-S.CR	Vertical height correction	8 (Fixed)	0 (Fixed)	+19 (Fixed)	0 (Fixed)	+5 (Fixed)	0 (Fixed)
10.EHT-COMP	Size Regulation	30 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)

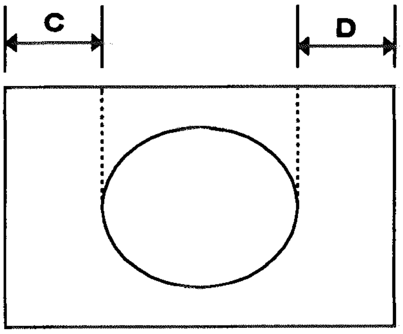
[AV-28WH3EP]

Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		16 : 9 ZOOM SUBTITLE	
		100Hz	120Hz	100Hz	120Hz	100Hz	120Hz
1.V- SHIFT	Vertical center	3	+1	0	0	0	0
2.V- SLOPE	Vertical def. Start position	14 (Fixed)	+1 (Fixed)	-3 (Fixed)	+3 (Fixed)	+2 (Fixed)	+4 (Fixed)
3.V-SIZE	Vertical height	24	-4	+9	-4	+12	-6
4.H-CENT	Horizontal center	25	-3	0	-3	0	-3
5.H-SIZE	Horizontal width	29	-1	+7	-1	0	-1
6.EW-PIN	Side pin correction	28	-1	+8	+1	+4	+1
7.EW-COR	Side pin four corner correction	10	-3	+19	+6	+10	+3
8.TRAPEZ	Trapezoidal distortion correction	3	0	0	0	-1	0
9.V-S.CR	Vertical height correction	10 (Fixed)	0 (Fixed)	+19 (Fixed)	0 (Fixed)	+5 (Fixed)	0 (Fixed)
10.EHT-COMP	Size Regulation	25 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V-SHIFT and V-SLOPE  	**Signal generator** **Remote control unit**		**1.V- SHIFT** **2.V- SLOPE**	[FULL mode] 1. Receive a circle pattern signal of vertical frequency 50Hz. 2. Select 4.DEF from the SERVICE MENU. 3. Select 1.V-SHIFT with the FUNCTION UP/DOWN key. 4. Adjust V-SHIFT to make **A = B**. 5. IF it is not enough to adjust the "V=SHIFT", choose "2.V=SLOPE" and adjust to make **A = B**. 6. Press the MENU key and memorize the set value.
Adjustment of V-SIZE  Screen size Screen size Picture size 100% Picture size 100%			**3.V-SIZE**	7. Receive a cross-hatch signal. 8. Select 3.V-SIZE and set the initial setting value. 9. Adjust V-SIZE and make sure that the vertical screen size of the picture size is in the bellow table. 10. Press the MENU key and memorize the set value. 11. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the vertical screen size is in the table below. 12. Press the MENU key and memorize the set value.

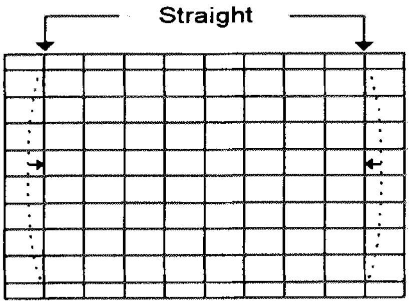
MODE	FULL	PANORAMIC	16:9 ZOOM SUB TITLE
SCREEN TOP	92%	87%	70%
SCREEN BOTTOM	92%	87%	83%

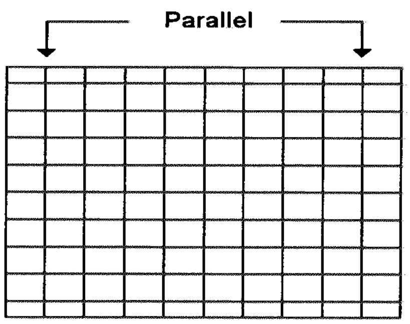
[SCREEN SIZE]

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of H.CENTER 			**4.H-CENT.**	13. Receive a circle pattern signal. 14. Select 4.H-CENT and set the initial setting value. 15. Adjust H-CENT to make **C=D**. 16. Press the MENU key and memorize the set value.
Adjustment of H.SIZE			**5.H-SIZE**	17. Receive a cross-hatch signal. 18. Select 5.H-SIZE and set the initial setting value. 19. Adjust H-SIZE and make sure that the horizontal screen size of the picture size is in the bellow table. 20. Press the MENU key and memorize the set value. 21. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the horizontal screen size is in the table below. 22. Press the MENU key and memorize the set value.

ASPECT MODE	PANORAMIC	16:9 ZOOM SUBTITLE	FULL
H SIZE	95%	92%	92%

[SCREEN SIZE]

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of EW-PIN 			**6.EW-PIN**	23. Select 6.EW-PIN and set the initial setting value 24. Adjust EW-PIN and make the 2nd.vertical lines at the left and right edges of the screen straight. Also make sure that the 3rd vertical lines are straight. 25. Press the MENU key and memorize the set value.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of EW-COR			**7.EW-COR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 26. Select 7.EW-COR and set the initial setting value. 27. Adjust EW-COR and make the vertical lines at the four corners of the screen straight. 28. Press the MENU key and memorize the set value.
Adjustment of TRAPEZ  			**8.TRAPEZ**	29. Receive a cross-hatch signal of vertical frequency 50Hz. 30. Select 4.DEF from the SERVICE MENU. 31. Select 8.TRAPEZ with the FUNCTION UP/DOWN key. 32. Set the initial setting value of TRAPEZ with the FUNCTION - or + key. 33. Adjust TRAPEZ and bring the VERTICAL lines at the right and left edges of the screen parallel . 34. Press the MENU key and memorize the set value.
Adjustment of V-S.CR			**9.V-S.CR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 35. Select 9.V-S.CR and set the initial setting value. 36. Adjust each item to get exact square of cross-hatch pattern. 37. Press the MENU key and memorize the set value. NOTE : Do not adjust PANORAMIC & 16:9 ZOOM SUBTITLE mode.
				At first the adjustment in 100Hz-FULL mode should be done, then the data for the other aspect mode is corrected in the respective value at the same time. And confirm the deflection adjustment initial setting value in 120Hz(NTSC EXT mode) FULL mode. If the adjustment in 100Hz each aspect mode has been done and stored, the data for the same aspect modes in 120Hz is corrected in the respective value. Only the data for the other aspect mode in 120Hz is corrected for itself.

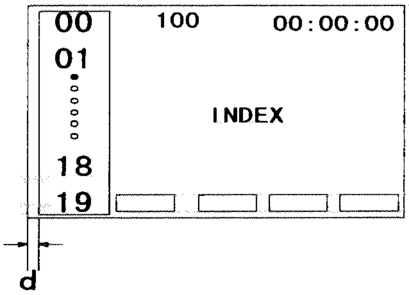
AUDIO CIRCUIT ADJUSTMENT

3. AUDIO / OSD

Setting item	Variable range	fixed value
1. CONC LIMIT***(Do not adjust)***	00H~FFH	0AH
2. A2 ID THR***(Do not adjust)***	00H~FFH	19H
3. TEXT MONO H	00H~FFH	1EH

OSD horizontal position

Item	Measuring instrument	Test point	Adjustment part	Description
TEXT MONO H			**3.TEXT MONO H**	★ No alignment, but adjust this mode if result of no alignment is too bad. 1. Select 3.AUDIO / OSD from SERVICE MENU. 2. Select 3.TEXT MONO H with the FUNCTION UP/DOWN key. 3. Push text key to get a picture of "TEXT-MONO H". 4. Push "SUBPAGE" key. It gets a picture as shown left. 5. Adjust the value of the distance "d" as shown left with the FUNCTION -/+ key. Push "SUBPAGE" key to check adjustment every adjust. 6. Press the MENU Key, and memorize the set values.



MODEL	d
ALL MODELS	5~20mm

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

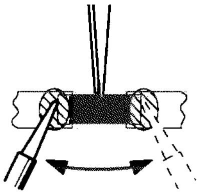
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

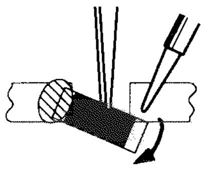
1. How to remove Chip parts

◆ Resistors, capacitors, etc

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

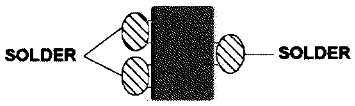


(2) Shift with tweezers and remove the chip part.

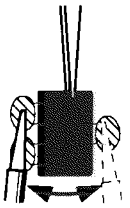


◆ Transistors, diodes, variable resistors, etc

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

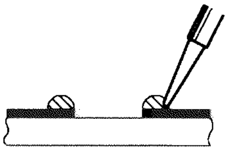


Note : After removing the part, remove remaining solder from the pattern.

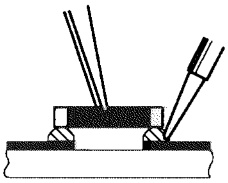
2. How to install Chip parts

◆ Resistors, capacitors, etc

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

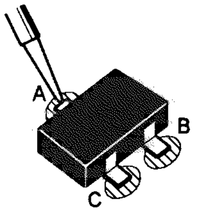


◆ Transistors, diodes, variable resistors, etc

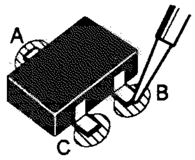
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



AV-32WH3EP/AV-28WH3EP
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	:PAL Colour bar signal
(2)Setting positions of each knob/button and variable resistor	:Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div :V ⇒ 5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

●Rated allowable power

No indication	:1/4[W]
Others	:As specified

●Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammble resistor
FR	:Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

●Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]

*Electrolytic Capacitors

47/50[Example]:Capacitance value [μF]/withstand voltage[V]

●Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply

═══════	:B1
▬▬▬▬	:B2(12V)
▬▭▬▭	:9V
▭▭▭▭	:5V

*Respective voltage values are indicated

(5)Test point

⊙	:Test point
○	:Only test point display

(6)Connecting method

▭	:Connector
○	:Wrapping or soldering
→> →}	:Receptacle

(7)Ground symbol

⊥	:LIVE side ground
⫠	:ISOLATED(NEUTRAL) side ground
⏚	:EARTH ground
▽	:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

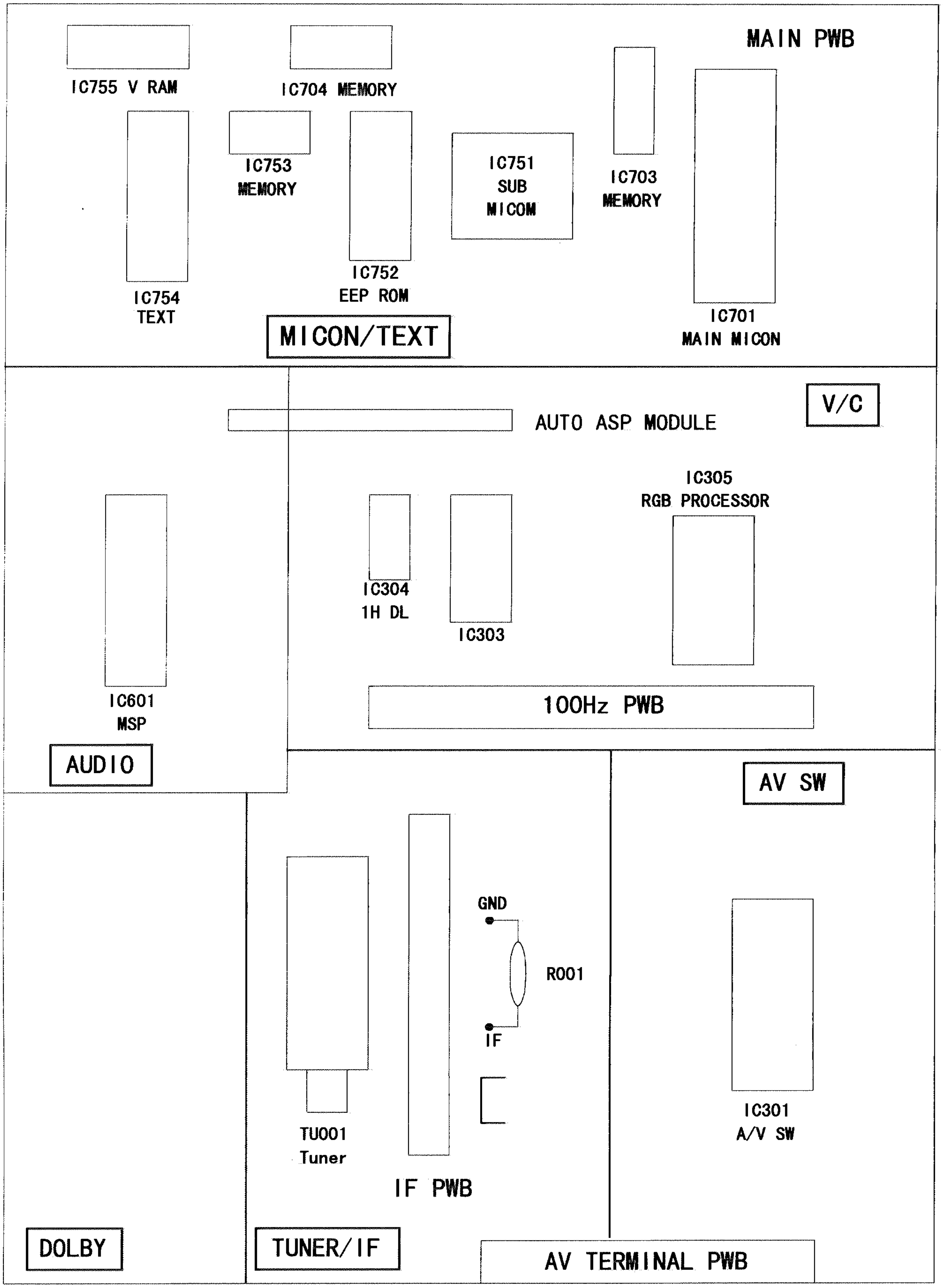
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⫠) side GND. Therefore, care must be taken for the following points.

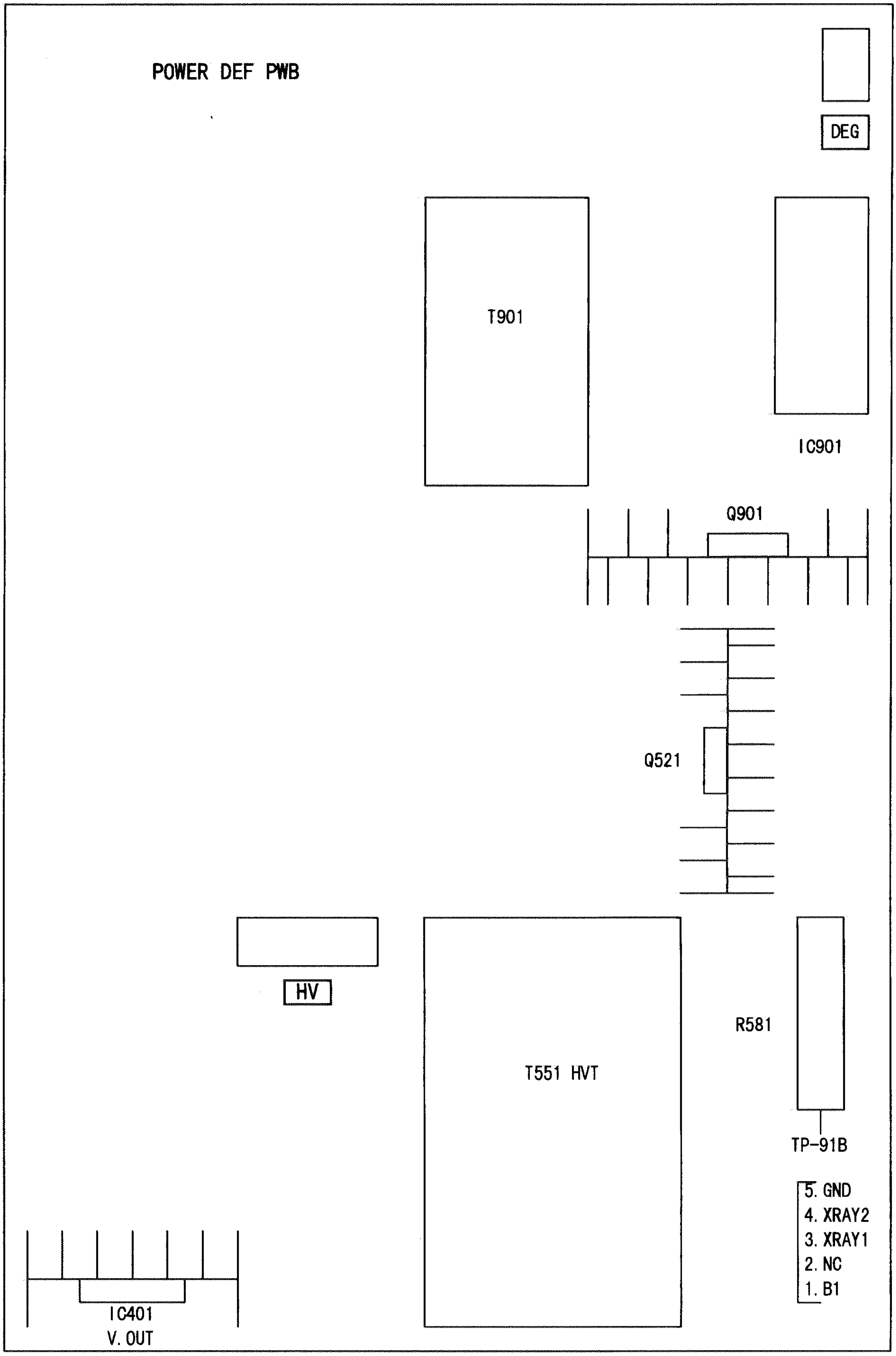
(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

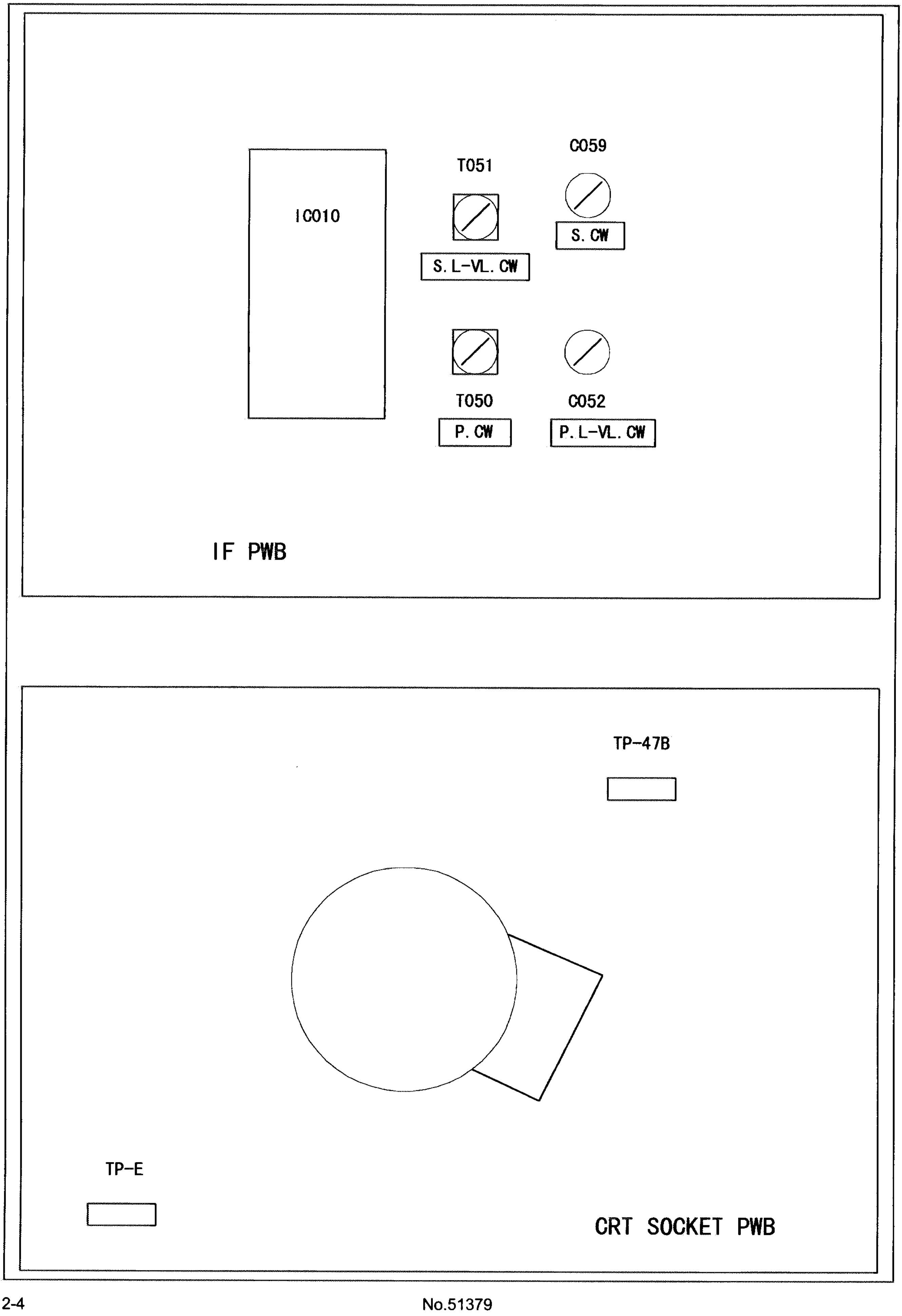
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇**Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

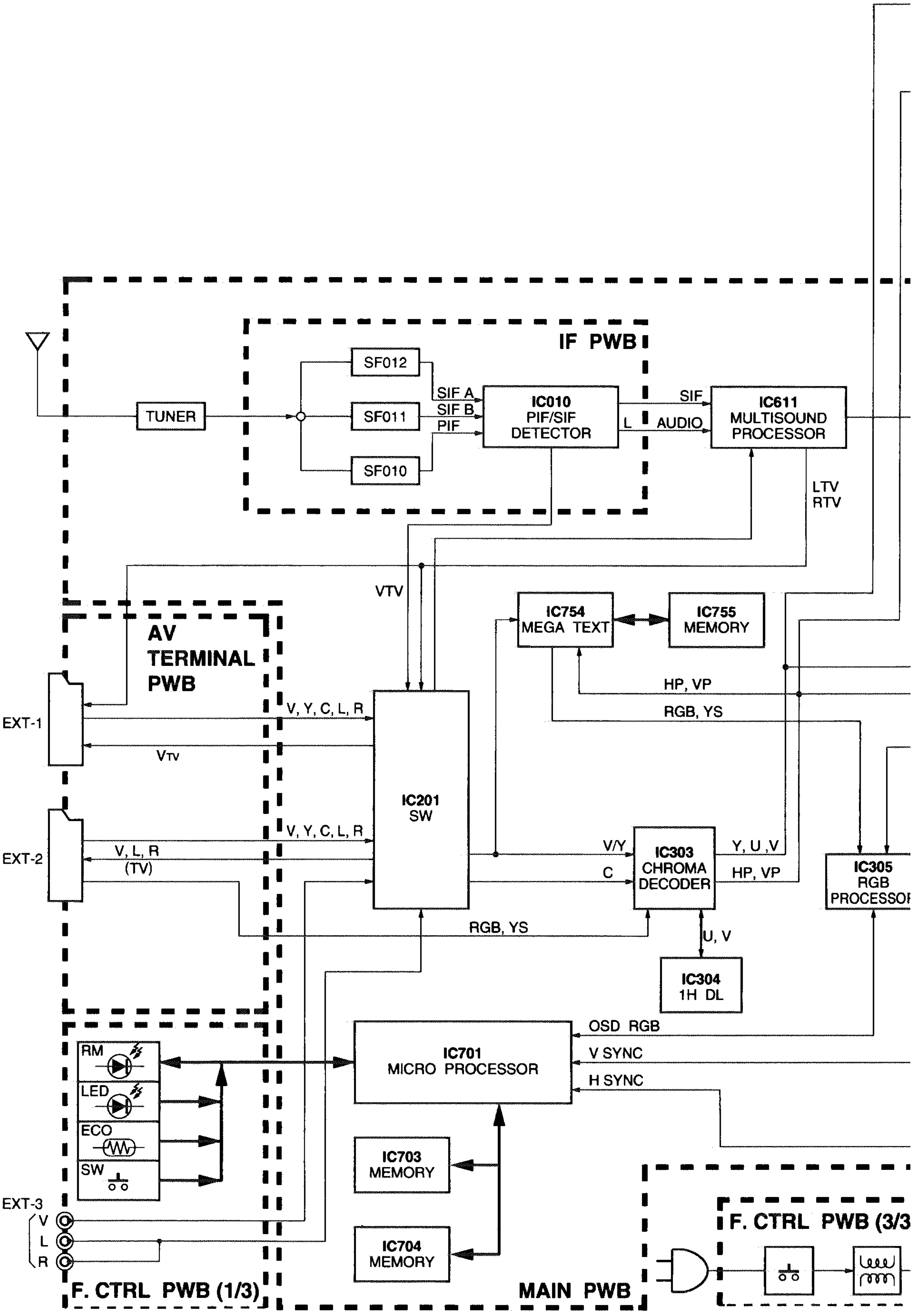
【 MAIN PARTS LOCATION AND ALIGNMENTS LOCATION 】

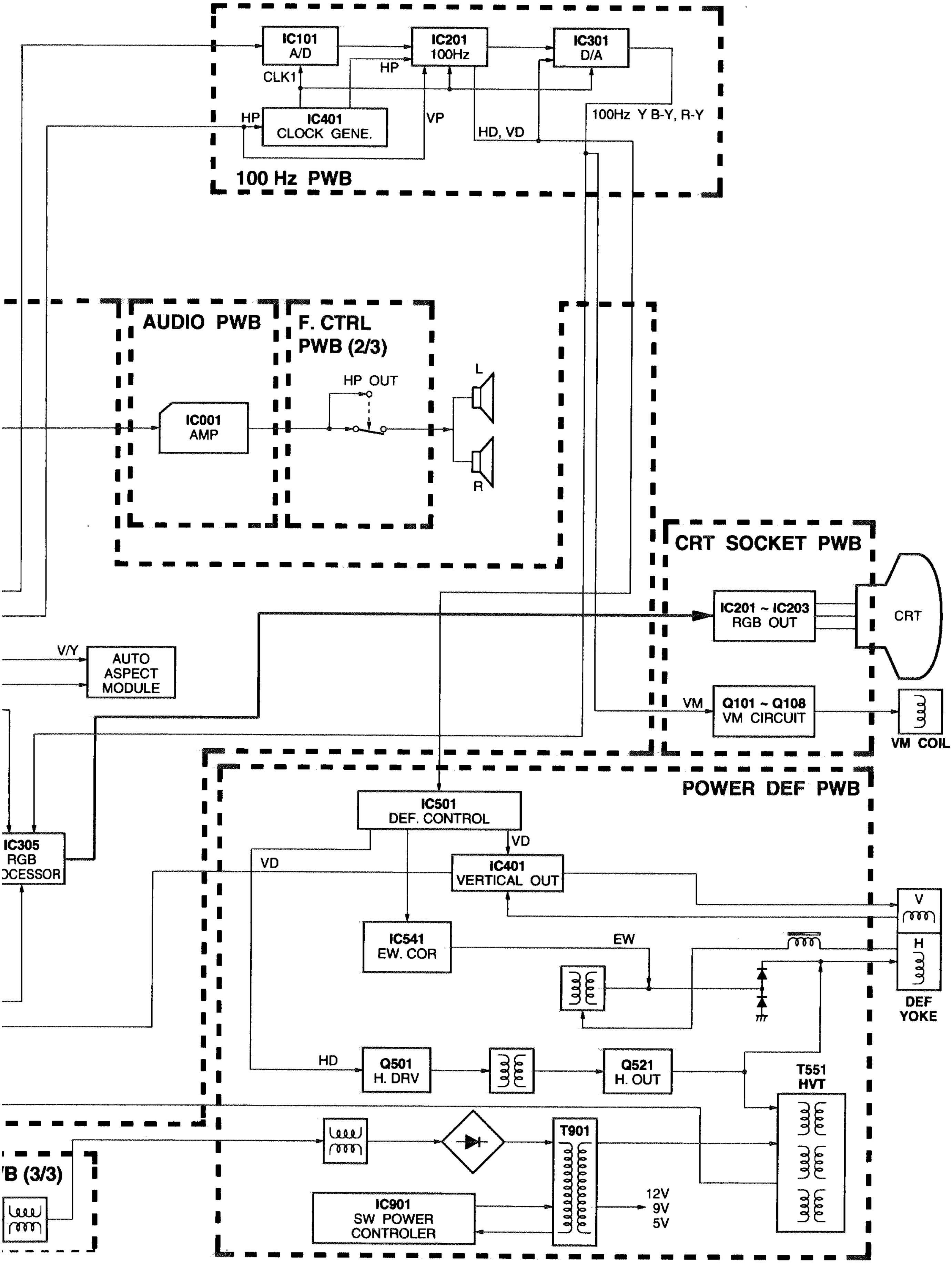

MAIN PWB
IC755 V RAM
IC704 MEMORY
IC753
MEMORY
IC751
SUB
MICOM
IC703
MEMORY
IC752
EEP ROM
IC754
TEXT
MICON/TEXT
IC701
MAIN MICON
AUTO ASP MODULE
V/C
IC305
RGB PROCESSOR
IC304
1H DL
IC303
100Hz PWB
IC601
MSP
AUDIO
AV SW
GND
R001
IF
TU001
Tuner
IF PWB
IC301
A/V SW
DOLBY
TUNER/IF
AV TERMINAL PWB


POWER DEF PWB
DEG
T901
IC901
Q901
Q521
HV
T551 HVT
R581
TP-91B
5. GND
4. XRAY2
3. XRAY1
2. NC
1. B1
IC401
V. OUT

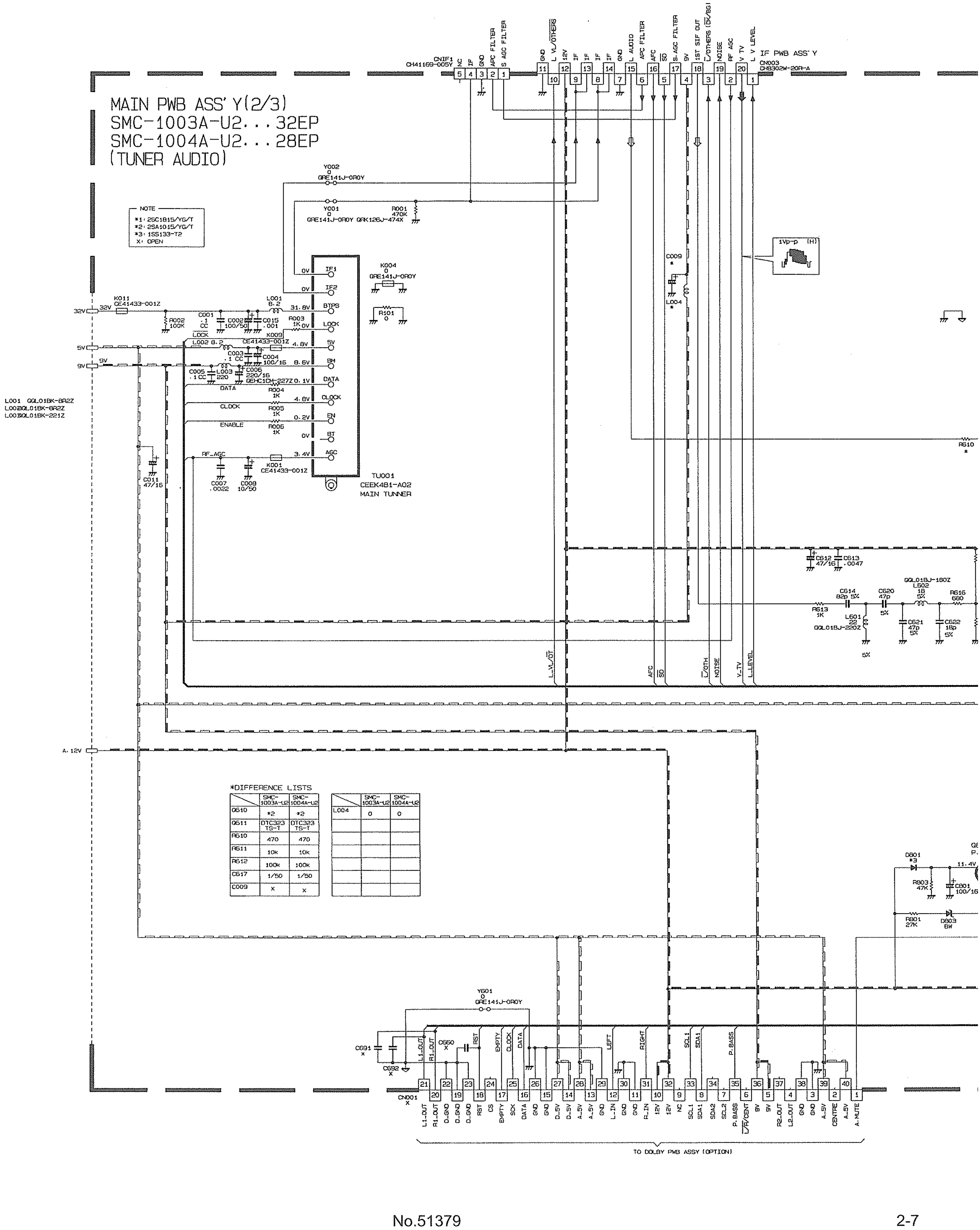

IC010
T051
S.L-VL.CW
C059
S.CW
T050
P.CW
C052
P.L-VL.CW
IF PWB
TP-47B
TP-E
CRT SOCKET PWB

【 BLOCK DIAGRAM 】


IF PWB
TUNER
SF012
SF011
SF010
SIF A
SIF B
PIF
IC010
PIF/SIF
DETECTOR
L
SIF
AUDIO
IC611
MULTISOUND
PROCESSOR
LTV
RTV
VTV
AV
TERMINAL
PWB
EXT-1
V, Y, C, L, R
VTV
EXT-2
V, L, R
(TV)
V, Y, C, L, R
IC201
SW
IC754
MEGA TEXT
IC755
MEMORY
HP, VP
RGB, YS
V/Y
C
IC303
CHROMA
DECODER
Y, U ,V
HP, VP
IC305
RGB
PROCESSOR
RGB, YS
U, V
IC304
1H DL
OSD RGB
V SYNC
H SYNC
IC701
MICRO PROCESSOR
IC703
MEMORY
IC704
MEMORY
RM
LED
ECO
SW
EXT-3
V
L
R
F. CTRL PWB (1/3)
MAIN PWB
F. CTRL PWB (3/3


IC101
A/D
IC201
100Hz
IC301
D/A
CLK1
HP
HP
IC401
CLOCK GENE.
VP
HD, VD
100Hz Y B-Y, R-Y
100 Hz PWB
AUDIO PWB
F. CTRL
PWB (2/3)
HP OUT
IC001
AMP
L
R
CRT SOCKET PWB
IC201 ~ IC203
RGB OUT
CRT
V/Y
AUTO
ASPECT
MODULE
VM
Q101 ~ Q108
VM CIRCUIT
VM COIL
POWER DEF PWB
IC501
DEF. CONTROL
VD
VD
IC305
RGB
)CESSOR
IC401
VERTICAL OUT
V
IC541
EW. COR
EW
H
DEF
YOKE
HD
Q501
H. DRV
Q521
H. OUT
T551
HVT
'B (3/3)
T901
IC901
SW POWER
CONTROLER
12V
9V
5V

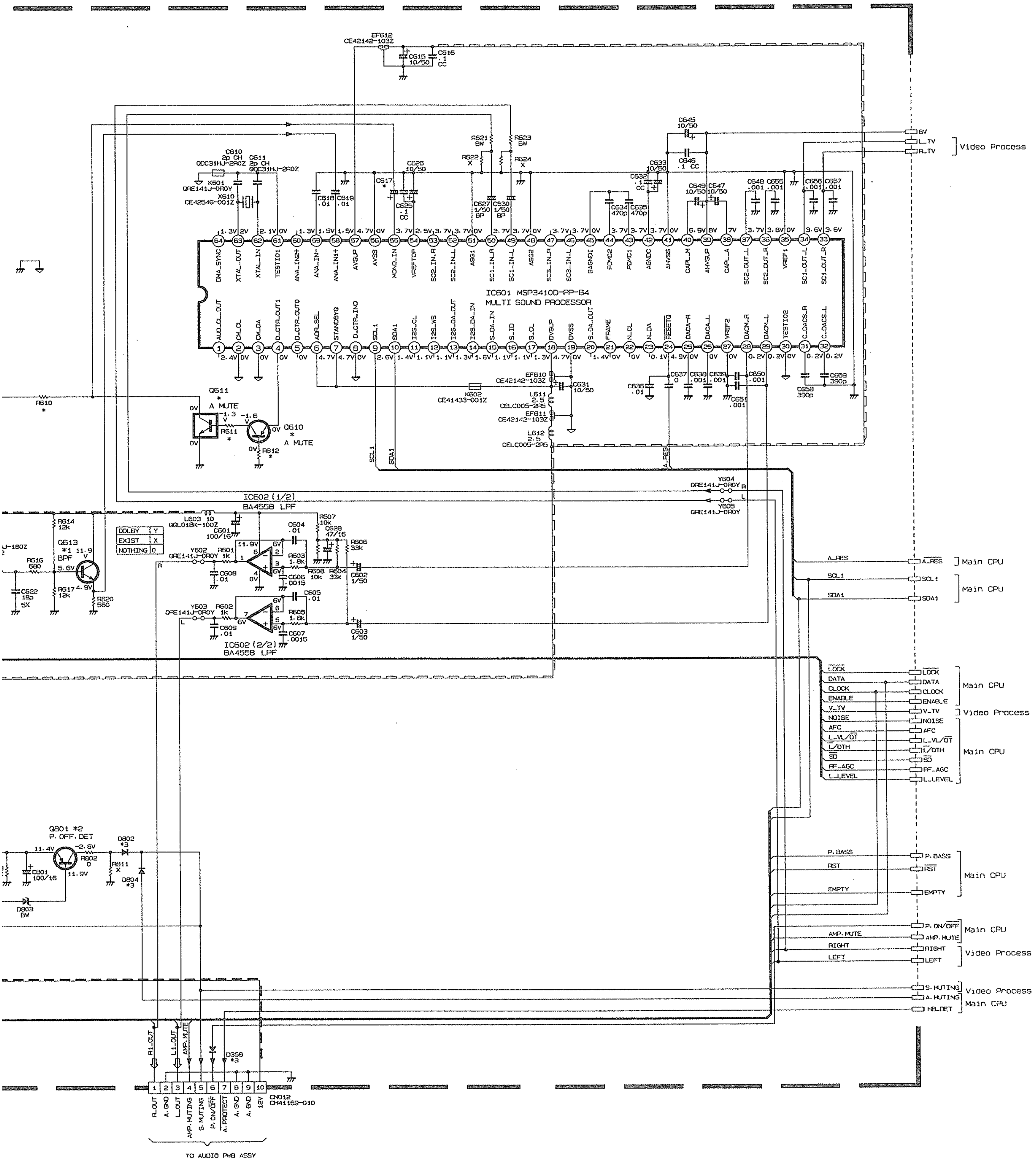
【 MAIN PWB CIRCUIT DIAGRAM(TUNER , AUDIO) 】


MAIN PWB ASS'Y(2/3)
SMC-1003A-U2...32EP
SMC-1004A-U2...28EP
(TUNER AUDIO)
NOTE
*1: 2SC1815/YG/T
*2: 2SA1015/YG/T
*3: 1SS133-T2
X: OPEN
CNIF1 CH41169-005Y
IF PWB ASS'Y
CN003 CH8302W-20R-A
NC
IF
GND
APC FILTER
S AGC FILTER
L VL/OTHERS
12V
L AUDIO
AFC
SD
9V
1ST SIF OUT
L/OTHERS (DK/BG)
NOISE
RF AGC
V TV
L V LEVEL
Y002 0 QRE141J-0R0Y
Y001 0 QRE141J-0R0Y
R001 470K QRK126J-474X
K004 0 QRE141J-0R0Y
R101 0
C009 *
L004 *
1Vp-p (H)
K011 CE41433-001Z
32V
5V
9V
A.12V
R002 100K
C001 .1 CC
C002 100/50
C015 .001
L001 8.2
R003 1K
K009 CE41433-001Z
L002 8.2
C003 .1 CC
C004 100/16
C005 .1 CC
L003 220
C006 220/16 QEHC1CM-227Z
DATA
CLOCK
ENABLE
R004 1K
R005 1K
R006 1K
RF_AGC
K001 CE41433-001Z
C007 .0022
C008 10/50
C011 47/16
L001 QQL01BK-8R2Z
L002 QQL01BK-8R2Z
L003 QQL01BK-221Z
0V IF1
0V IF2
31.8V BTPS
0V LOCK
4.8V 5V
8.6V BM
0.1V DATA
4.8V CLOCK
0.2V EN
0V BT
3.4V AGC
TU001 CEEK481-A02 MAIN TUNNER
R610 *
C612 47/16
C613 .0047
C614 82p 5%
C620 47p 5%
QQL01BJ-180Z
L602 18 5%
R616 680
R613 1K
L601 22 QQL01BJ-220Z
C621 47p 5%
C622 18p 5%
5%
L_VL/OT
AFC
SD
L/OTH
NOISE
V_TV
L_LEVEL
D801 *3
11.4V
R803 47K
C801 100/16
R801 27K
D803 BW
Y601 0 QRE141J-0R0Y
C691 x
C692 x
C650 x
L1_OUT
R1_OUT
RST
EMPTY
CLOCK
DATA
LEFT
RIGHT
SCL1
SDA1
P.BASS
CN001 x
L1_OUT
R1_OUT
D_GND
D_GND
RST
CS
EMPTY
SCK
DATA
GND
GND
D_5V
D_5V
A_5V
A_5V
GND
L_IN
GND
GND
R_IN
12V
12V
NC
SCL1
SDA1
SCL2
SDA2
P.BASS
L/R/CENT
9V
9V
R2_OUT
L2_OUT
GND
GND
A_5V
CENTRE
A_5V
A.MUTE
TO DOLBY PWB ASSY (OPTION)

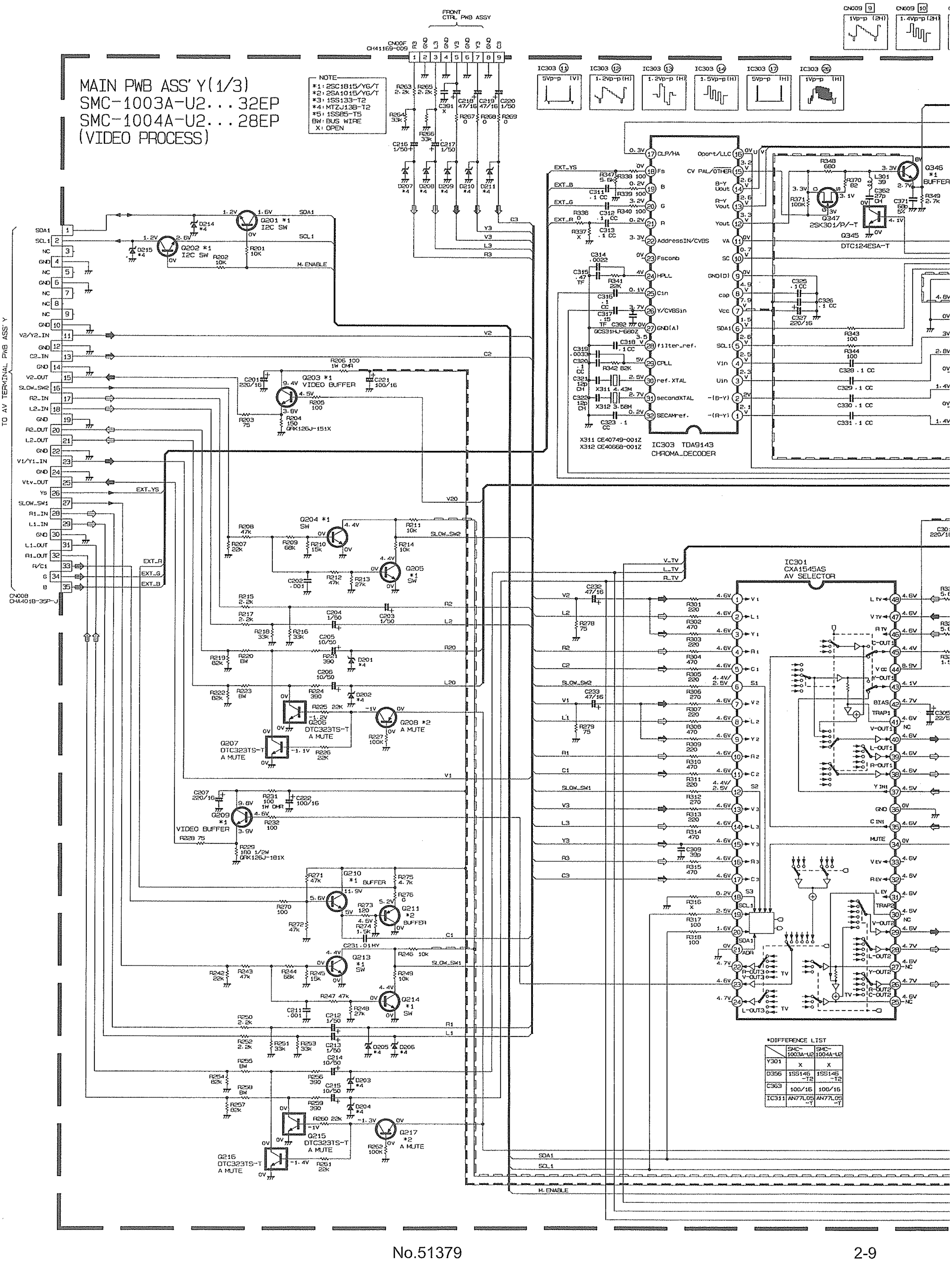
*DIFFERENCE LISTS

	SMC-1003A-U2	SMC-1004A-U2
Q610	*2	*2
Q611	DTC323 TS-T	DTC323 TS-T
R610	470	470
R611	10k	10k
R612	100k	100k
C617	1/50	1/50
C009	X	X

	SMC-1003A-U2	SMC-1004A-U2
L004	0	0


IC601 MSP3410D-PP-B4
MULTI SOUND PROCESSOR
DMA_SYNC
XTAL_OUT
XTAL_IN
TESTIO1
ANA_IN2+
ANA_IN-
ANA_IN1+
AVSUP
AVSS
MONO_IN
VREFTOP
SC2_IN_R
SC2_IN_L
ASG1
SC1_IN_R
SC1_IN_L
ASG2
SC3_IN_R
SC3_IN_L
BAGNDI
PDMC2
PDMC1
AGNDC
AHVSS
CAPL_M
AHVSUP
CAPL_A
SC2_OUT_L
SC2_OUT_R
VREF1
SC1_OUT_L
SC1_OUT_R
AUD_CL_OUT
CW_CL
CW_DA
D_CTR_OUT1
D_CTR_OUT0
ADR_SEL
STANDBYQ
D_CTR_IN0
SCL1
SDA1
I2S_CL
I2S_WS
I2S_DA_OUT
I2S_DA_IN
S_DA_IN
S_ID
S_CL
DVSUP
DVSS
S_DA_OUT
FRAME
N_CL
N_DA
RESETQ
DACA_R
DACA_L
VREF2
DACM_R
DACM_L
TESTIO2
C_DACS_R
C_DACS_L
EF612
CE42142-103Z
C615
10/50
C616
.1
CC
C610
2p CH
QDC31HJ-2R0Z
C611
2p CH
QDC31HJ-2R0Z
K601
QRE141J-0R0Y
X610
CE42546-001Z
R621 BW
R623 BW
R622 X
R624 X
C626 10/50
C617 *
C618 .01
C619 .01
C625 .1 CC
C627 1/50 BP
C630 1/50 BP
C634 470p
C635 470p
C632 .1 CC
C633 10/50
C645 10/50
C646 .1 CC
C649 10/50
C647 10/50
C648 .001
C655 .001
C656 .001
C657 .001
EF610
CE42142-103Z
L611
2.5
CELC005-2R5
EF611
CE42142-103Z
L612
2.5
CELC005-2R5
C631 10/50
K602
CE41433-001Z
C636 .01
C637 0
C638 .001
C639 .001
C650 .001
C651 .001
C658 390p
C659 390p
Q611
*
A MUTE
Q610
*
A MUTE
R610 *
R611 *
R612 *
SCL1
SDA1
A_RES
Y604
QRE141J-0R0Y
Y605
QRE141J-0R0Y
R
L
IC602 (1/2)
BA4558 LPF
IC602 (2/2)
BA4558 LPF
L603 10
QQL01BK-100Z
C601 100/16
R607 10k
C604 .01
C628 47/16
R606 33k
R603 1.8k
R608 10k
R604 33k
C602 1/50
C606 .0015
C608 .01
Y602
QRE141J-0R0Y
R601 1k
Y603
QRE141J-0R0Y
R602 1k
C605 .01
R605 1.8k
C607 .0015
C609 .01
C603 1/50
11.9V
6V
0V
DOLBY Y
EXIST X
NOTHING 0
Q613
*1
BPF
R614 12k
R616 680
C622 18p 5%
R617 12k
R620 560
Q801 *2
P. OFF. DET
11.4V
-2.6V
R802 0
C801 100/16
11.9V
D802 *3
R811 X
D804 *3
D803 BW
D358 *3
R1_OUT
L1_OUT
AMP. MUTE
CN012
CH41169-010
R_OUT
A. GND
L_OUT
AMP. MUTING
S. MUTING
P. ON/OFF
A. PROTECT
A. GND
A. GND
12V
TO AUDIO PWB ASSY
8V
L_TV
R_TV
Video Process
A_RES
SCL1
SDA1
Main CPU
LOCK
DATA
CLOCK
ENABLE
V_TV
NOISE
AFC
L_VL/OT
L/OTH
SD
RF_AGC
L_LEVEL
Main CPU
Video Process
Main CPU
P. BASS
RST
EMPTY
Main CPU
P. ON/OFF
AMP. MUTE
RIGHT
LEFT
Main CPU
Video Process
S. MUTING
A. MUTING
HB_DET
Video Process
Main CPU

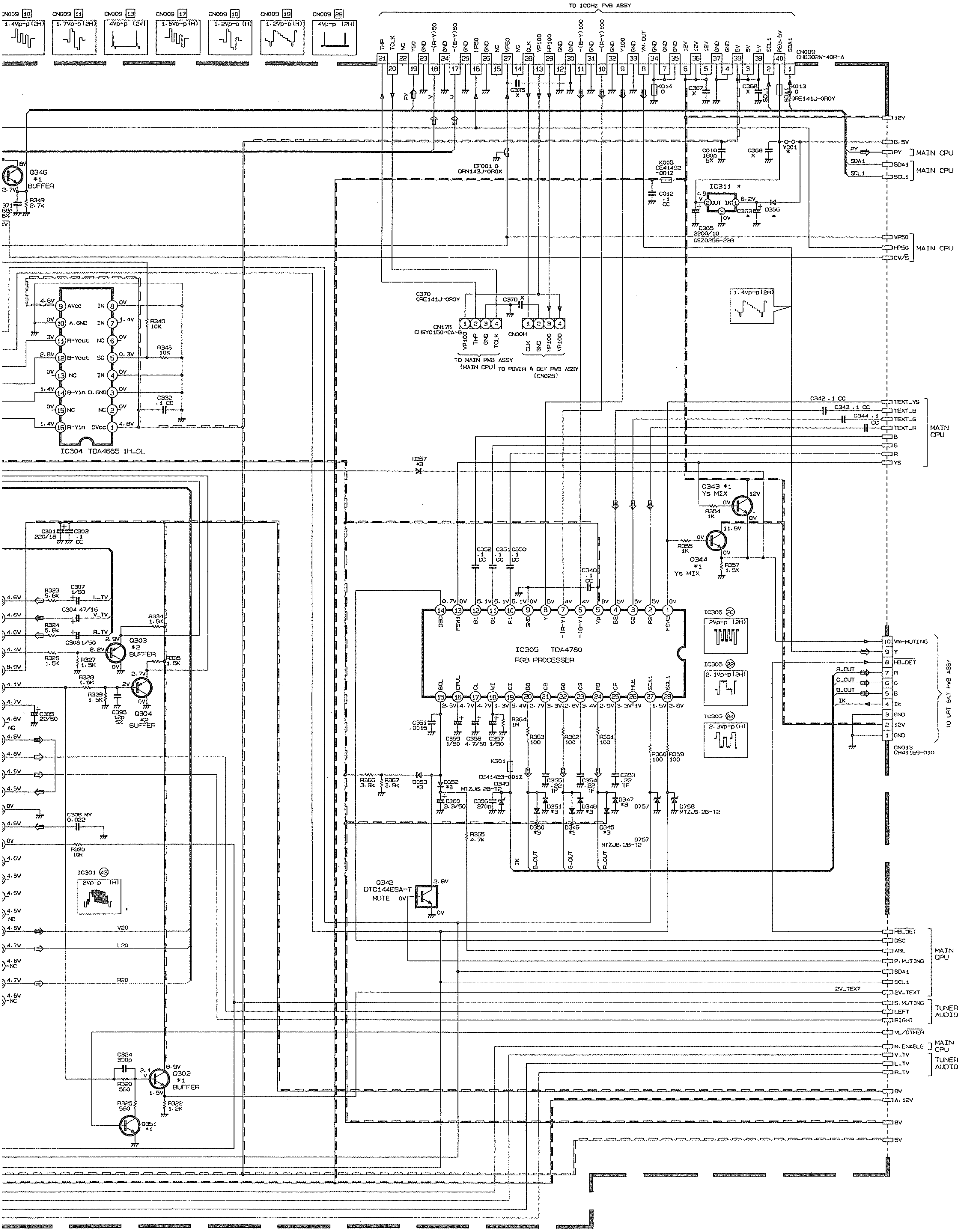
【 MAIN PWB CIRCUIT DIAGRAM(Video Process) 】


MAIN PWB ASS'Y(1/3)
SMC-1003A-U2...32EP
SMC-1004A-U2...28EP
(VIDEO PROCESS)
FRONT CTRL PWB ASSY
CN00F CH41169-009
CN009 9 1Vp-p (2H)
CN009 10 1.4Vp-p (2H)
IC303 11 5Vp-p (V)
IC303 12 1.2Vp-p (H)
IC303 13 1.2Vp-p (H)
IC303 14 1.5Vp-p (H)
IC303 17 5Vp-p (H)
IC303 25 1Vp-p (H)
TO AV TERMINAL PWB ASS'Y
CN008 CHA4018-35P-J
Q201 *1 I2C SW
Q202 *1 I2C SW
Q203 *1 VIDEO BUFFER
Q204 *1 SW
Q205 *1 SW
Q206 DTC323TS-T A MUTE
Q207 DTC323TS-T A MUTE
Q208 *2 A MUTE
Q209 *1 VIDEO BUFFER
Q210 *1 BUFFER
Q211 *2 BUFFER
Q213 *1 SW
Q214 *1 SW
Q215 DTC323TS-T A MUTE
Q216 DTC323TS-T A MUTE
Q217 *2 A MUTE
IC303 TDA9143 CHROMA_DECODER
X311 CE40749-001Z
X312 CE40668-001Z
Q346 *1 BUFFER
Q347 2SK301/P/-T
Q345 DTC124ESA-T
IC301 CXA1545AS AV SELECTOR
SDA1
SCL1
M.ENABLE
EXT_YS
EXT_R
EXT_G
EXT_B
SLOW_SW1
SLOW_SW2

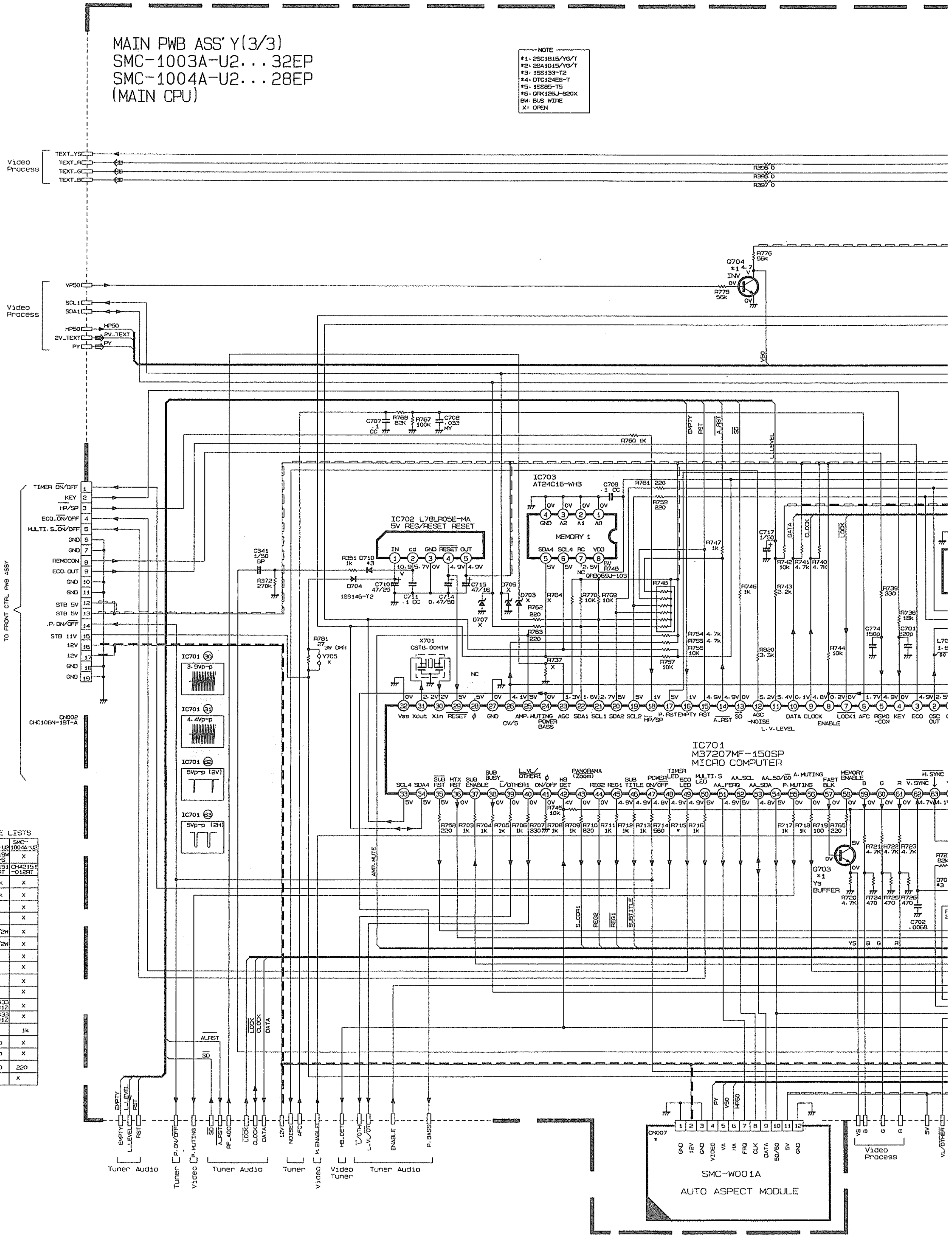
NOTE
*1: 2SC1815/YG/T
*2: 2SA1015/YG/T
*3: 1SS133-T2
*4: MTZJ13B-T2
*5: 1SS85-T5
BW: BUS WIRE
X: OPEN

*DIFFERENCE LIST

	SMC-1003A-U2	SMC-1004A-U2
Y301	X	X
D356	1SS146-T2	1SS146-T2
C363	100/16	100/16
IC311	AN77L05-T	AN77L05-T

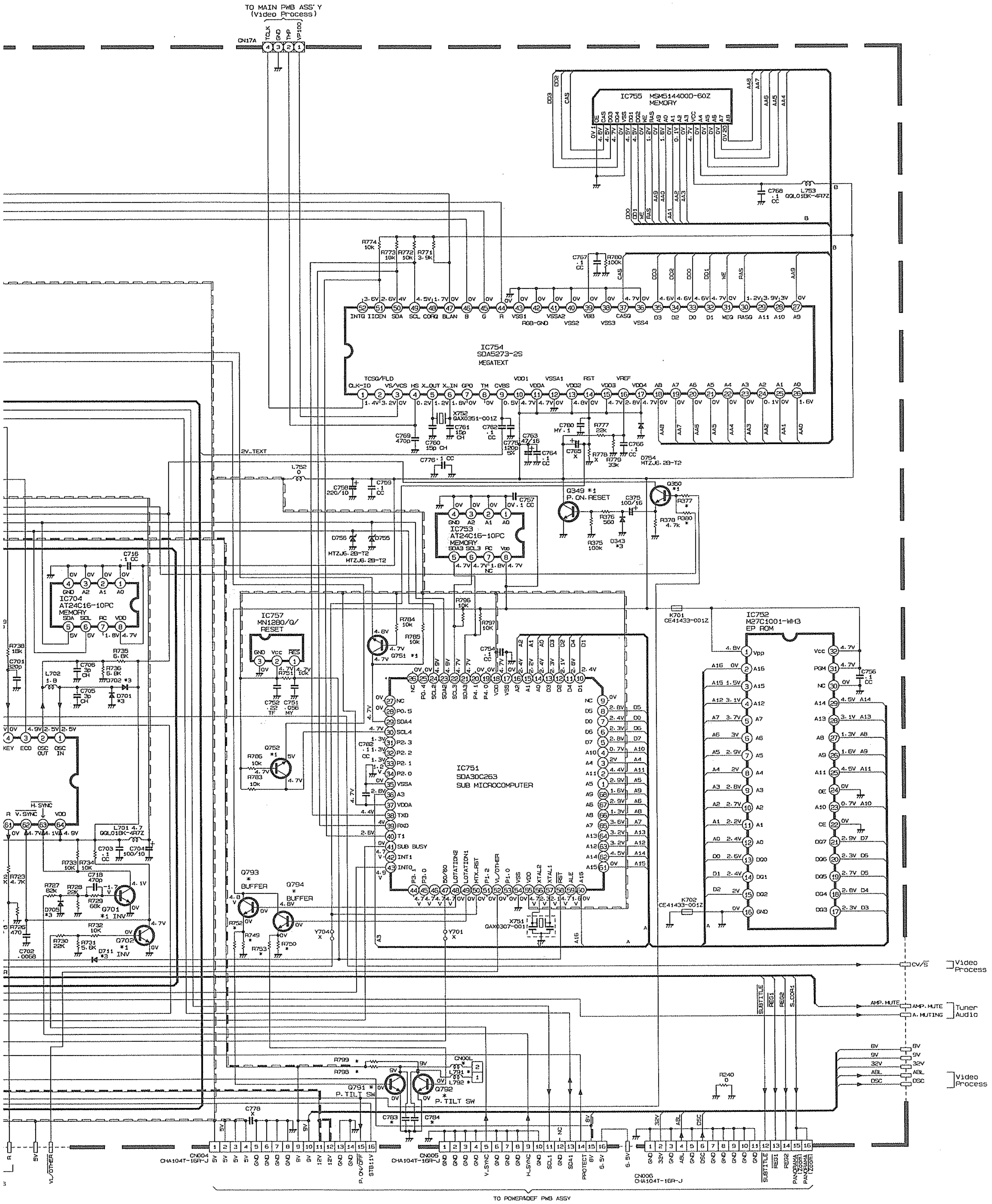

TO 100Hz PWB ASSY
CN009 10 1.4Vp-p (2H)
CN009 11 1.7Vp-p (2H)
CN009 13 4Vp-p (2V)
CN009 17 1.5Vp-p (H)
CN009 18 1.2Vp-p (H)
CN009 19 1.2Vp-p (H)
CN009 29 4Vp-p (2H)
CN009 CHB302W-40R-A
GRE141J-0R0Y
Q345 *1 BUFFER
IC304 TDA4665 1H_DL
EF001 0 QRN143J-0R0X
K005 CE41492 -0012
IC311 *
C365 2200/10 QEZ0256-228
Y301 *
C370 GRE141J-0R0Y
CN17B CHGY0150-0A-G
TO MAIN PWB ASSY (MAIN CPU)
CN00H
TO POWER & DEF PWB ASSY (CN025)
1.4Vp-p (2H)
12V
6.5V
PY
MAIN CPU
SDA1
SCL1
VP50
HP50
CV/S
TEXT_YS
TEXT_B
TEXT_G
TEXT_R
B
G
R
YS
D357 *3
Q343 *1 Ys MIX
Q344 *1 Ys MIX
IC305 TDA4780 RGB PROCESSER
IC305 20 2Vp-p (2H)
IC305 22 2.1Vp-p (2H)
IC305 24 2.3Vp-p (H)
Vm-MUTING
Y
HB_DET
R
G
B
IK
GND
12V
CN013 CH41169-010
TO CRT SKT PWB ASSY
Q303 *2 BUFFER
Q304 *2 BUFFER
Q342 DTC144ESA-T MUTE
K301 CE41433-001Z
D349 MTZJ6.2B-T2
D757 MTZJ6.2B-T2
D758 MTZJ6.2B-T2
IC301 43 2Vp-p (H)
V20
L20
R20
HB_DET
DSC
ABL
P.MUTING
SDA1
SCL1
2V_TEXT
S.MUTING
LEFT
RIGHT
TUNER AUDIO
VL/OTHER
M.ENABLE
V_TV
L_TV
R_TV
9V
A.12V
8V
5V
Q302 *1 BUFFER
Q351 *1

【 MAIN PWB CIRCUIT DIAGRAM(MAIN CPU) 】

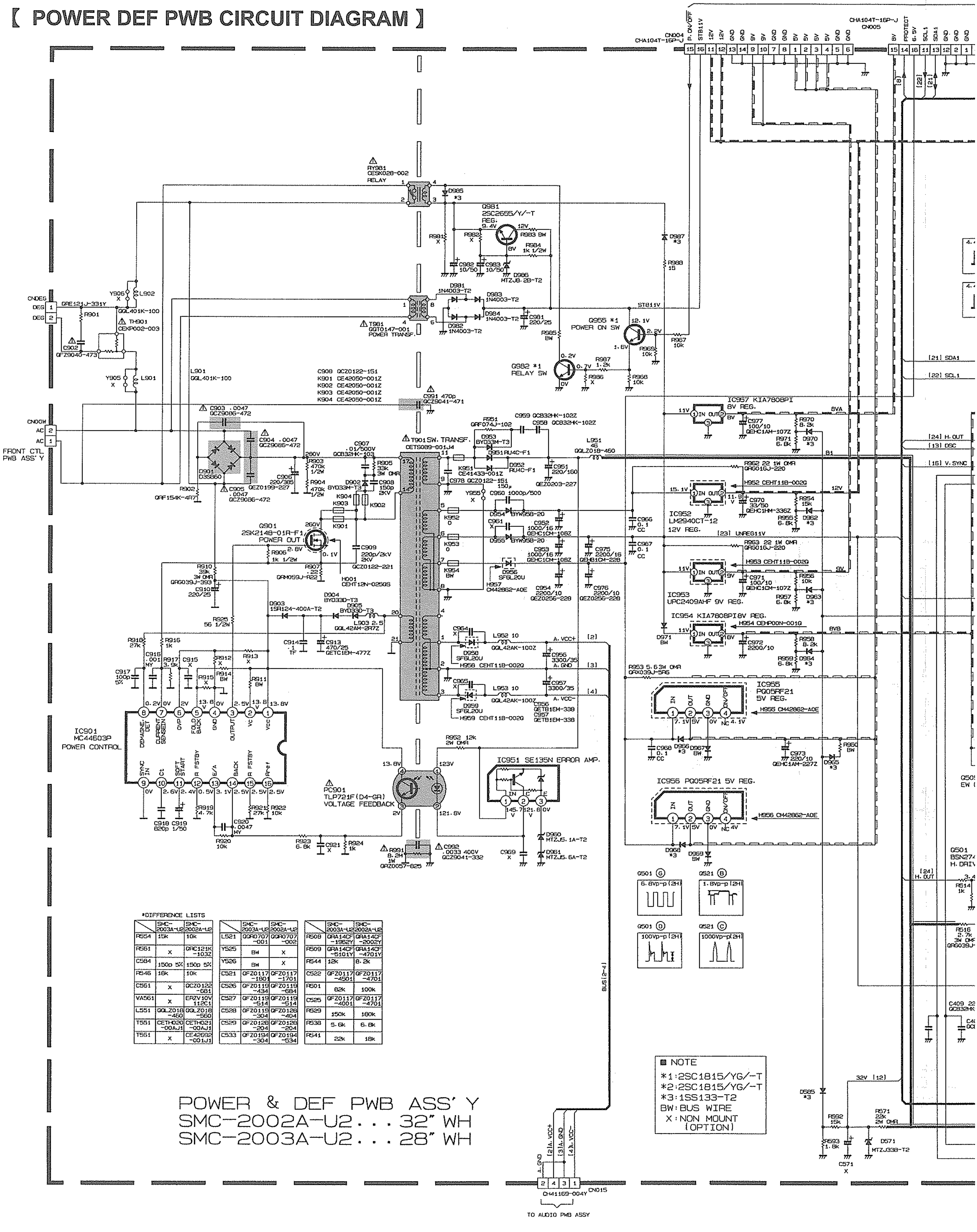

MAIN PWB ASS'Y(3/3)
SMC-1003A-U2...32EP
SMC-1004A-U2...28EP
(MAIN CPU)
NOTE
*1: 2SC1815/YG/T
*2: 2SA1015/YG/T
*3: 1SS133-T2
*4: DTC124ES-T
*5: 1SS85-T5
*6: QRK126J-820X
BW: BUS WIRE
X: OPEN
Video Process
TEXT_YS
TEXT_R
TEXT_G
TEXT_B
VP50
SCL1
SDA1
HP50
2V_TEXT
PY
Q704 *1 INV
IC703 AT24C16-WH3
MEMORY 1
IC702 L78LR05E-MA
5V REG/RESET RESET
X701 CSTB.00MTW
IC701 M37207MF-150SP
MICRO COMPUTER
IC701 ㉚ 3.9Vp-p
IC701 ㉛ 4.4Vp-p
IC701 ㉜ 5Vp-p (2V)
IC701 63 5Vp-p (2H)
Q703 *1 Ys BUFFER
TO FRONT CTRL PWB ASSY
TIMER ON/OFF
KEY
HP/SP
ECO_ON/OFF
MULTI.S_ON/OFF
GND
REMOCON
ECO.OUT
STB 5V
P.ON/OFF
STB 11V
12V
CN002 CHC10BN-19T-A
CN007
SMC-W001A
AUTO ASPECT MODULE
Tuner Audio
Tuner
Video
Video Tuner
Video Process

*DIFFERENCE LISTS

	SMC-1003A-U2	SMC-1004A-U2
CN00L	CH8219W-02P-S	X
CN007	CH42151-012AT	CH42151-012AT
R749	8.2k	X
R750	8.2k	X
R752	1k	X
R753	1k	X
R798	*6 1/2W	X
R799	*6 1/2W	X
Q791	*1	X
Q792	*1	X
Q793	*1	X
Q794	*1	X
L791	CE41433-001Z	X
L792	CE41433-001Z	X
R715	1k	1k
C783	68p	X
C784	68p	X
R377	220	220
R380	X	X


TO MAIN PWB ASS'Y (Video Process)
CN17A
TCLK
GND
THP
YP100
IC755 MSM514400D-60Z MEMORY
C768 .1 CC
L753 QQL01BK-4R7Z
R774 10k
R773 10k
R772 10k
R771 3.9k
C767 .1 CC
R760 100k
IC754 SDA5273-2S MEGATEXT
INTQ IICEN SDA SCL CORQ BLAN B G R VSS1 VSSA2 VBB CASQ D3 D2 D0 D1 WEQ RASQ A11 A10 A9
RGB-GND VSS2 VSS3 VSS4
CLK-IG VS/VCS HS X_OUT X_IN GPO TM CVBS VDD1 VDDA VSSA1 VDD2 RST VREF VDD4 A8 A7 A6 A5 A4 A3 A2 A1 A0
TCSQ/FLD
X752 QAX0351-001Z
C769 470p
C760 15p CH
C761 15p CH
C762 .1 CC
C775 120p SV
C763 47/16
C764 .1 CC
C776 .1 CC
C780 MY .1
R777 22k
C765 X
R778 X
R779 33k
C766 .1 CC
D764 MTZJ6.2B-T2
2V_TEXT
L752 0
C758 220/10
C759 .1 CC
C757 .1 CC
IC753 AT24C16-10PC MEMORY
GND A2 A1 A0
SDA3 SCL3 RC VDD
D756 MTZJ6.2B-T2
D755 MTZJ6.2B-T2
Q349 *1 P.ON.RESET
C375 100/16
R376 560
R375 100k
D343 *3
Q350 *1
R377 *
R378 4.7k
R380 *
C716 .1 CC
IC704 AT24C16-10PC MEMORY
GND A2 A1 A0
SDA SCL RC VDD
R738 18k
C701 120p
R735 6.8K
R736 6.8K
C706 3p CH
C705 3p CH
L702 1.8
D702 *3
D701 *3
KEY ECO OSC OUT OSC IN
H.SYNC
V.SYNC
VDD
L701 4.7 QQL01BK-4R7Z
C703 .1 CC
C704 100/10
R739 10K
R734 10K
R723 4.7K
C718 470p
R727 82K
R728 22K
R729 68K
D705 *3
Q701 *1 INV
R732 10K
R726 470
R730 22K
R731 5.6K
D711 *3
Q702 *1 INV
C702 .0068
IC757 MN1280/Q/ RESET
GND Vcc RES
R751 10k
C752 .22 TF
C751 .056 MY
R784 10k
R785 10k
Q751 *1
R796 10K
R797 10K
C754 .1 CC
K701 CE41433-001Z
IC752 M27C1001-WH3 EP ROM
C756 .1 CC
Q752
R786 10k
R783 10k
C782 .1 CC
IC751 SDA30C263 SUB MICROCOMPUTER
NC P0.5 SDA4 SCL4 P2.3 P2.2 P2.1 P2.0 VSSA A3 VDDA TXD RXD T1 SUB BUSY INT1 INT0
P3.1 50/60 LOTATION2 LOTATION1 MTX_RST P1.2 VL/OTHER P1.0 VDD VSS XTAL2 XTAL1 RST ALE A16
X751 QAX0307-001Z
K702 CE41433-001Z
Vpp A16 A15 A12 A7 A6 A5 A4 A3 A2 A1 A0 DQ0 DQ1 DQ2 GND
Vcc PGM NC A14 A13 A8 A9 A11 OE A10 CE DQ7 DQ6 DQ5 DQ4 DQ3
Q793 * BUFFER
Q794 * BUFFER
R752 *
R749 *
R753 *
R750 *
Y704 X
Y701 X
CV/S
Video Process
AMP.MUTE
A.MUTING
Tuner Audio
SUBTITLE REG1 REG2 S.CCR1
8V 9V 32V ABL DSC
Video Process
R240 0
R799 *
R798 *
CN00L
L791 *
L792 *
Q791 * P.TILT SW
Q792 * P.TILT SW
C778 X
C783 *
C784 *
CN004 CHA104T-16R-J
5V 5V 5V 5V GND GND GND GND 9V 9V 12V GND GND P.ON/OFF STB11V
CN005 CHA104T-16R-J
GND GND GND GND V_SYNC GND GND GND H_SYNC GND SCL1 SDA1 PROTECT 8V 6.5V
6.5V
CN006 CHA104T-16R-J
GND 32V GND ABL GND DSC GND GND GND GND SUBTITLE REG1 REG2 PANORAMA (ZOOM) PANORAMA (ZOOM)
TO POWER&DEF PWB ASSY
R
5V
VL/OTHER

【 POWER DEF PWB CIRCUIT DIAGRAM 】


CN004 CHA104T-16P-J
P.ON/OFF
STB11V
12V
GND
9V
5V
CHA104T-16P-J CN005
8V
PROTECT
6.5V
SDA1
SCL1
RY981 CESK028-002 RELAY
D985 *3
Q981 2SC2655/Y/-T REG.
9.4V
12V
R983 BW
R984 1k 1/2W
R981 X
R982 X
C982 10/50
C983 10/50
D986 MTZJ8.2B-T2
D987 *3
R988 15
D981 1N4003-T2
D983 1N4003-T2
D984 1N4003-T2
D982 1N4003-T2
C981 220/25
T981 QQT0147-001 POWER TRANSF.
R985 BW
Q955 *1 POWER ON SW
STB11V
12.1V
2.2V
1.6V
R969 10K
R967 10K
Q982 *1 RELAY SW
0.2V
0.7V
R987 1.2K
R986 X
R968 10K
CNDEG
DEG
GRE121J-331Y
R901
Y906 X
L902
QQL401K-100
TH901 CEKP002-003
C902 QFZ9040-473
Y905 X
L901
L901 QQL401K-100
C908 QCZ0122-151
K901 CE42050-001Z
K902 CE42050-001Z
K903 CE42050-001Z
K904 CE42050-001Z
C991 470p QCZ9041-471
CNOOW
AC
FRONT CTL. PWB ASS'Y
C903 .0047 QCZ9086-472
C904 .0047 QCZ9086-472
D901 D3SB60
C905 .0047 QCZ9086-472
R902 QRF154K-4R7
C906 220/385 QEZ0199-227
R903 470k 1/2W
R904 470k 1/2W
C907 .01/500V QCB32HK-103
R905 33k 3W OMR
D902 BYD33M-T3
C908 150p 2KV
T901 SW. TRANSF. CETS089-001J4
R951 QRF074J-102
C959 QCB32HK-102Z
C958 QCB32HK-102Z
D953 BYD33M-T3
D951 RU4C-F1
D952 RU4C-F1
K951 CE41433-001Z
C978 QCZ0122-151 150p
C951 220/160 QEZ0203-227
L951 46 QQLZ018-460
Y955 X
C950 1000p/500
D954 BYW98-20
C961 X
C952 1000/16 QEHC1CM-108Z
D955 BYW98-20
C953 1000/16 QEHC1CM-108Z
C975 2200/16 QEZ0256-228
D956 SFGL20U
H957 CM42862-A0E
C954 2200/10 QEZ0256-228
C976 2200/10 QEZ0256-228
K952 0
K953 0
K954 BW
Q901 2SK2148-01R-F1 POWER OUT
260V
2.8V
0.1V
R906 1k 1/2W
C909 220p/2kV QCZ0122-221
R907 22 QRM059J-R22
H001 CEHT12N-0250S
R910 39k 3W OMR QRG039J-393
C910 220/25
D903 1SR124-400A-T2
D904 BYD33D-T3
D905 BYD33D-T3
L903 2.5 QQL42AM-2R7Z
R925 56 1/2W
C914 .1 TF
C913 470/25 GETC1EM-477Z
R918 27k
R916 1k
C916 .001 MY
R917 3.9k
C915 X
R912 X
R913 X
C917 100p 5%
R915 X
R914 BW
R911 BW
IC901 MC44603P POWER CONTROL
DEMAGNE DET
CURRENT SENSEIN
OVP
FOLD BACK
GND
OUTPUT
Vc
Vcc
SYNC IN
Ct
SOFT START
R FSTBY
E/A
BACK
R FSTBY
Rref
0.2V 0V 2V 5V 13.6V 2.5V 13.8V 13.8V
0V 2.6V 2.4V 0.5V 3.1V 2.5V 2.5V 2.5V
R919 4.7k
R921 27k
R922 10k
C918 820p
C919 1/50
C920 .0047 MY
R920 10k
R923 6.8k
C921 X
R924 1k
PC901 TLP721F(D4-GR) VOLTAGE FEEDBACK
13.8V
123V
2V
121.8V
R991 8.2M 1W QRZ0057-825
C992 .0033 400V QCZ9041-332
R952 12k 2W OMR
C964 X
L952 10 QQL42AK-100Z
D958 SFGL20U
H958 CEHT11B-002Q
C956 3300/35
C965 X
L953 10 QQL42AK-100Z
D959 SFGL20U
H959 CEHT11B-002Q
C957 3300/35
C956 QETB1EM-338
C957 QETB1EM-338
A.VCC+
A.GND
A.VCC-
[2]
[3]
[4]
IC951 SE135N ERROR AMP.
145.7V
121.8V
0V
C969 X
D960 MTZJ5.1A-T2
D961 MTZJ5.6A-T2
IC957 KIA7808PI 8V REG.
11V
8V
8VA
C977 100/10 QEHC1AM-107Z
R970 8.2k
R971 6.8k
D970 *3
B1
R962 22 1W OMR QRG01GJ-220
H952 CEHT11B-002Q
15.1V
11.9V
12V
IC952 LM2940CT-12 12V REG.
C970 33/50 QEHC1HM-336Z
R954 15k
R955 6.8k
D962 *3
C966 0.1 CC
C967 0.1 CC
[23] UNREG11V
R963 22 1W OMR QRG01GJ-220
H953 CEHT11B-002Q
9V
IC953 UPC2409AHF 9V REG.
C971 100/10 QEHC1CM-107Z
R956 10K
R957 6.8K
D963 *3
IC954 KIA7808PI 8V REG.
H954 CEHP00N-001Q
8VB
D971 BW
C972 2200/10
R958 8.2k
R959 6.8k
D964 *3
R953 5.6 3W OMR QRX039J-5R6
IC955 PQ05RF21 5V REG.
IN
OUT
GND
ON/OFF
H955 CM42862-A0E
7.1V 5V 0V 4.1V
NC
C968 0.1 CC
D966 *3
D967 BW
C973 220/10 QEHC1AM-227Z
R960 BW
D965 *3
IC956 PQ05RF21 5V REG.
H956 CM42862-A0E
7.1V 5V 0V 4V
D968 *3
D969 BW
Q501 Ⓖ
6.8Vp-p(2H)
Q521 Ⓑ
1.8Vp-p(2H)
Q501 Ⓓ
100Vp-p(2H)
Q521 Ⓒ
1000Vp-p(2H)
[21] SDA1
[22] SCL1
[24] H.OUT
[13] OSC
[16] V.SYNC
Q501 BSN274 H.DRIV
[24] H.OUT
R514 1k
R516 2.7k 3W OMR QRG039J-
C409 QCB32HK
32V [12]
D585 *3
R592 15k
R593 1.8k
R571 22k 2W OMR
D571 MTZJ33B-T2
C571 X
BUS(2-4)
A.GND
A.VCC+
A.GND
A.VCC-
CN015 CH41169-004Y
TO AUDIO PWB ASSY

*DIFFERENCE LISTS

	SMC-2003A-U2	SMC-2002A-U2
R554	15k	10k
R561	X	QRC121K-103Z
C584	150p 5%	150p 5%
R546	18k	10k
C561	X	QCZ0122-681
VA561	X	ERZV10V112C1
L551	QQLZ018-460	QQLZ018-560
T551	CETH020-00AJ1	CETH021-00AJ1
T561	X	CE42692-001J1

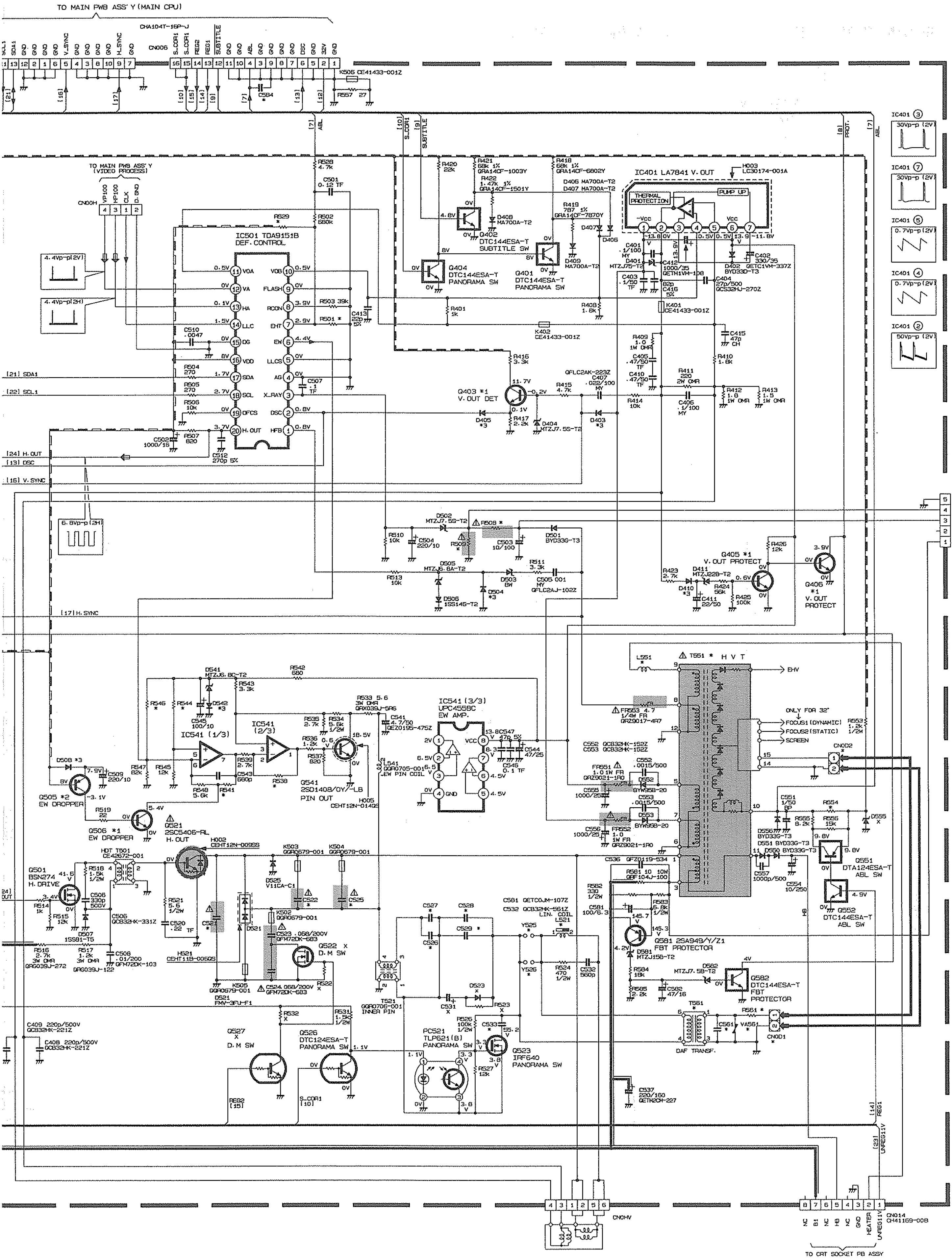
	SMC-2003A-U2	SMC-2002A-U2
L521	QQR0707-001	QQR0707-002
Y525	BW	X
Y526	BW	X
C521	QFZ0117-1801	QFZ0117-1701
C526	QFZ0119-434	QFZ0119-684
C527	QFZ0119-514	QFZ0119-514
C528	QFZ0119-304	QFZ0128-404
C529	QFZ0128-204	QFZ0128-204
C533	QFZ0194-304	QFZ0194-534

	SMC-2003A-U2	SMC-2002A-U2
R508	QRA14CF-1962Y	QRA14CF-2002Y
R509	QRA14CF-5101Y	QRA14CF-4701Y
R544	12k	8.2k
C522	QFZ0117-4501	QFZ0117-4701
R501	82k	100k
C525	QFZ0117-4001	QFZ0117-4701
R529	150k	180k
R538	5.6k	6.8k
R541	22k	18k

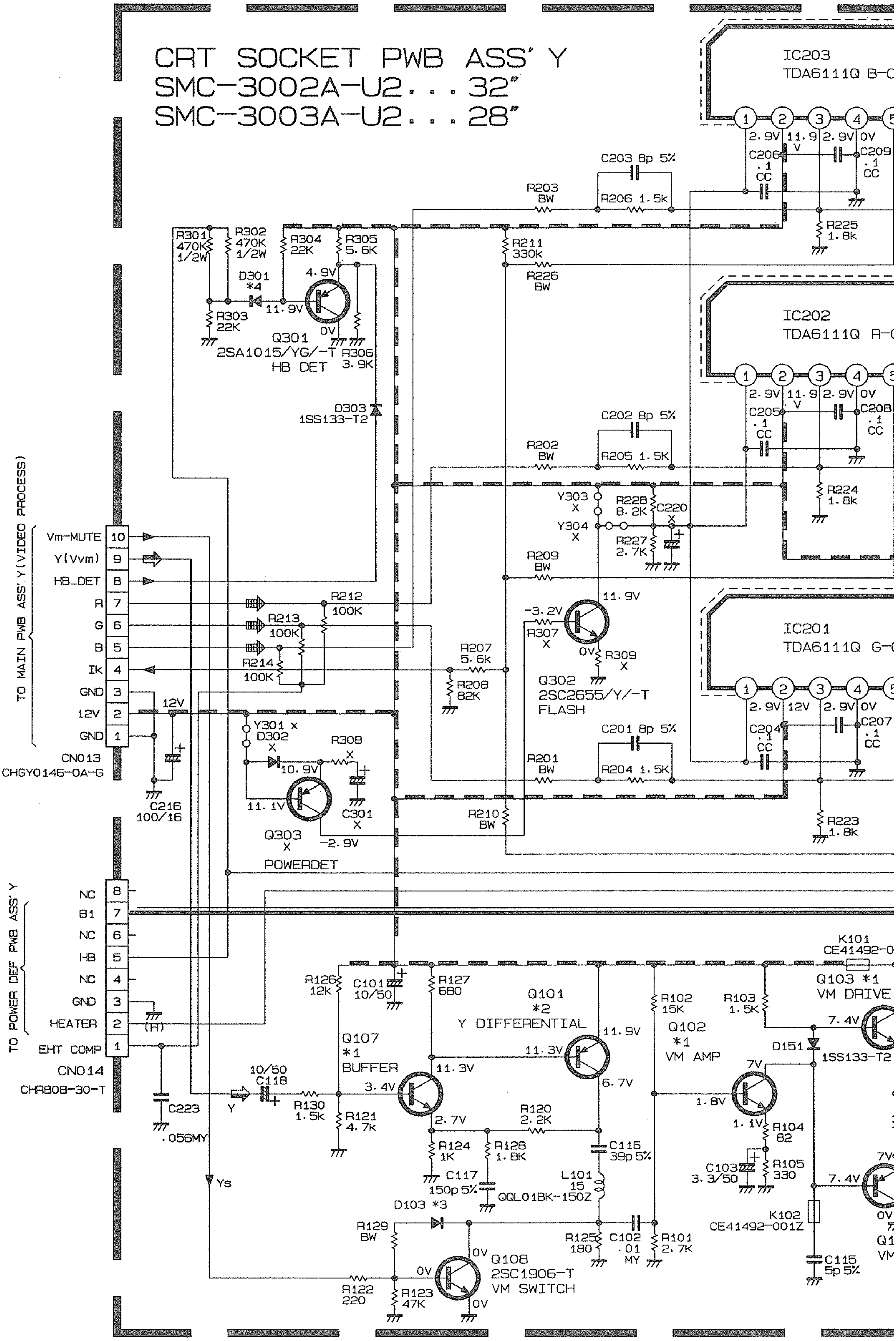
POWER & DEF PWB ASS'Y
SMC-2002A-U2 . . . 32" WH
SMC-2003A-U2 . . . 28" WH

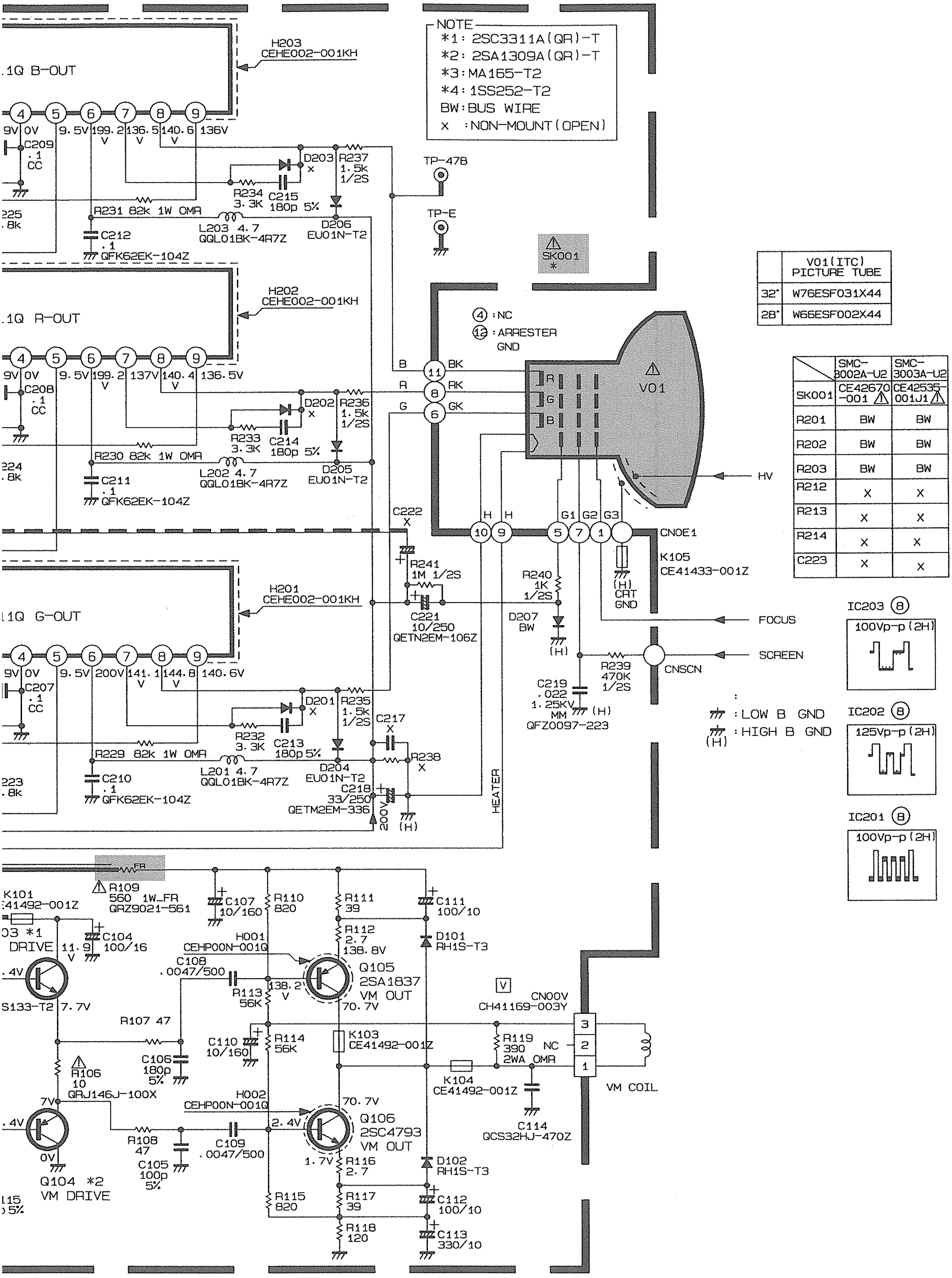
■ NOTE

*1:2SC1815/YG/-T
*2:2SC1815/YG/-T
*3:1SS133-T2
BW:BUS WIRE
X:NON MOUNT
(OPTION)


TO MAIN PWB ASS'Y (MAIN CPU)
CHA104T-16P-J
CN006
K506 CE41433-001Z
R557 27
C584
TO MAIN PWB ASS'Y (VIDEO PROCESS)
CN00H
VP100
HP100
CLK
D.GND
4.4Vp-p(2V)
4.4Vp-p(2H)
IC501 TDA9151B
DEF. CONTROL
VOA
VA
HA
LLC
DG
VDD
SDA
SCL
DFCS
H.OUT
VOB
FLASH
RCON
EHT
EW
LLCS
AG
X_RAY
DSC
HFB
R528 4.7k
C501 0.12 TF
R502 680k
R503 39k
R501
C413 220 5%
C510 .0047
R504 270
R505 270
R506 10k
R507 820
C502 1000/16
C512 270p 5%
[21] SDA1
[22] SCL1
[24] H.OUT
[13] DSC
[16] V.SYNC
[17] H.SYNC
6.8Vp-p(2H)
R420 22k
R421 68k 1% QRA14CF-1003Y
R422 1.47k 1% QRA14CF-1501Y
R418 68k 1% QRA14CF-6802Y
D406 MA700A-T2
D407 MA700A-T2
R419 787 1% QRA14CF-7870Y
Q402 DTC144ESA-T SUBTITLE SW
D408 MA700A-T2
Q404 DTC144ESA-T PANORAMA SW
Q401 DTC144ESA-T PANORAMA SW
D409 MA700A-T2
R401 1k
R408 1.8k
IC401 LA7841 V.OUT
H003 LC30174-001A
THERMAL PROTECTION
PUMP UP
-Vcc
Vcc
C401 .1/100 MY
D401 MTZJ75-T2
C412 1000/35 QETN1VM-108
C402 330/35 QETC1VM-337Z
D402 BYD33D-T3
C403 .1/50 TF
C416 82p 5%
C404 27p/500 QCS32HJ-270Z
K401 CE41433-001Z
K402 CE41433-001Z
C415 47p CH
R409 1.0 1W OMR
C405 .47/50 TF
C410 .47/50 TF
R411 220 2W OMR
R410 1.8k
R412 1.8 1W OMR
R413 1.5 1W OMR
QFLC2AK-223Z
C407 .022/100 MY
R414 10k
C406 .1/100 MY
R416 3.3k
Q403 *1 V.OUT DET
R415 4.7k
R417 2.2k
D404 MTZJ7.5S-T2
D405 *3
D403 *3
IC401 ③ 30Vp-p (2V)
IC401 ⑦ 30Vp-p (2V)
IC401 ⑤ 0.7Vp-p (2V)
IC401 ④ 0.7Vp-p (2V)
IC401 ② 50Vp-p (2V)
GND
X_RAY2
X_RAY1
NC
B1
CN00X
D502 MTZJ7.5S-T2
R508
D501 BYD33G-T3
R510 10k
C504 220/10
R509
C503 10/100
R511 3.3k
C505 .001 MY QFLC2AJ-102Z
R513 10k
D505 MTZJ6.8A-T2
D503 BW
D504 *3
D506 1SS145-T2
R426 12k
Q405 *1 V.OUT PROTECT
Q406 *1 V.OUT PROTECT
R423 2.7k
D411 MTZJ22B-T2
D410 *3
C411 22/50
R424 56k
R425 100k
L551
T551 * H V T
EHV
FR553 4.7 1/4W FR QRZ9017-4R7
ONLY FOR 32"
FOCUS1 (DYNAMIC)
FOCUS2 (STATIC)
SCREEN
R553 1.2k 1/2W
CN002
C552 QCB32HK-152Z
C553 QCB32HK-152Z
FR551 1.0 1W FR QRZ9021-1R0
C552 .0015/500
D552 BYW95B-20
C555 1000/25
C553 .0015/500
D553 BYW95B-20
C556 1000/25
FR552 1.0 1W FR QRZ9021-1R0
C551 1/50 BP
R554
R555 8.2k
R556 15k
D555
D556 BYD33G-T3
D551 BYD33G-T3
D550 BYD33G-T3
Q551 DTA124ESA-T ABL SW
Q552 DTC144ESA-T ABL SW
C557 1000p/500
C554 10/250
D541 MTZJ6.8C-T2
R542 680
R543 3.3k
R546
R544
D542 *3
C545 100/10
IC541 (1/3)
IC541 (2/3)
R547 82k
R545 12k
R539 2.7k
C543 680p
R548 5.6k
R541
R538
R533 5.6 3W OMR QRX039J-5R6
R535 2.7k
R534 5.6k 1/2W
R536 1.2k
R537 820
C541 4.7/50 QEZ0195-475Z
Q541 2SD1408/0Y/-LB PIN OUT
L541 QQR0705-001 EW PIN COIL
H005 CEHT12N-014QS
IC541 (3/3) UPC4558C EW AMP.
C547 47p 5%
C544 47/25
C546 0.1 TF
D508 *3
C509 220/10
Q505 *2 EW DROPPER
R519 22
Q506 *1 EW DROPPER
Q521 2SC5406-RL H.OUT
H002 CEHT12N-009SS
K503 QQR0679-001
K504 QQR0679-001
HDT T501 CE42672-001
Q501 BSN274 H.DRIVE
R518 1.5k 1/2W
C506 330p 500V
R514 1k
R515 12k
C506 QCB32HK-331Z
D507 1SS81-T5
R521 5.6 1/2W
C520 .22 TF
H521 CEHT11B-006QS
D525 V11CA-C1
C522
C525
C521
D521
K502 QQR0679-001
C523 .068/200V QFM72DK-683
C524 .068/200V QFM72DK-683
K505 QQR0679-001
D521 FMV-3FU-F1
Q522 X D.M SW
R522 X
R516 2.7k 3W OMR QRG039J-272
R517 1.2k 3W OMR QRG039J-122
C508 .01/200 QFM72DK-103
C409 220p/500V QCB32HK-221Z
C408 220p/500V QCB32HK-221Z
R532 X
R531 1.5k 1/2W
Q527 X D.M SW
Q526 DTC124ESA-T PANORAMA SW
REG2 [15]
S_COR1 [10]
C527
C528
C526
C529
C581 QETC0JM-107Z
C532 QCB32HK-561Z LIN. COIL
L521
Y525
Y526
R524 470 1/2W
C532 560p
T521 QQR0706-001 INNER PIN
C531 X
D523
R523
R526 100k 1/2W
C533
PC521 TLP621(B) PANORAMA SW
Q523 IRF640 PANORAMA SW
R527 12k
C536 QFZ0119-534
R581 10 10W QRF104J-100
R582 330 1/2W
C581 100/6.3
R583 6.8k 1/2W
Q581 2SA949/Y/Z1 FBT PROTECTOR
D581 MTZJ15B-T2
D582 MTZJ7.5B-T2
Q582 DTC144ESA-T FBT PROTECTOR
R584 18k
R585 2.2k
C582 47/16
T561 DAF TRANSF.
R561
C561
VA561
CN001
C537 220/160 QETH2CH-227
UNREG11V
REG1
CNOHV
NC
B1
HB
GND
HEATER
CN014 CH41169-008
TO CRT SOCKET PB ASSY

【 CRT SKT PWB CIRCUIT DIAGRAM 】


CRT SOCKET PWB ASS' Y
SMC-3002A-U2 . . . 32"
SMC-3003A-U2 . . . 28"
IC203
TDA6111Q B-C
IC202
TDA6111Q R-
IC201
TDA6111Q G-
2. 9V
11. 9 V
0V
C206 .1 CC
C209 .1 CC
C205 .1 CC
C208 .1 CC
C204 .1 CC
C207 .1 CC
12V
C203 8p 5%
C202 8p 5%
C201 8p 5%
R203 BW
R206 1. 5K
R202 BW
R205 1. 5K
R201 BW
R204 1. 5K
R225 1. 8K
R224 1. 8K
R223 1. 8K
R211 330k
R226 BW
R301 470K 1/2W
R302 470K 1/2W
R304 22K
R305 5. 6K
D301 *4
4. 9V
11. 9V
R303 22K
0V
Q301
2SA1015/YG/-T
HB DET
R306 3. 9K
D303
1SS133-T2
Y303 X
Y304 X
R228 8. 2K
C220 X
R227 2. 7K
R209 BW
11. 9V
-3. 2V
R307 X
0V
R309 X
Q302
2SC2655/Y/-T
FLASH
R207 5. 6K
R208 82K
R212 100K
R213 100K
R214 100K
TO MAIN PWB ASS' Y(VIDEO PROCESS)
Vm-MUTE 10
Y(Vvm) 9
HB_DET 8
R 7
G 6
B 5
Ik 4
GND 3
12V 2
GND 1
CN013
CHGY0146-0A-G
12V
C216 100/16
Y301 X
D302 X
R308 X
10. 9V
11. 1V
C301 X
Q303 X
-2. 9V
POWERDET
R210 BW
TO POWER DEF PWB ASS' Y
NC 8
B1 7
NC 6
HB 5
NC 4
GND 3
HEATER 2
EHT COMP 1
(H)
CN014
CHRB08-30-T
C223 .056MY
Y
Ys
10/50 C118
R130 1. 5k
R126 12k
C101 10/50
R127 680
Q107 *1 BUFFER
3. 4V
11. 3V
R121 4. 7k
2. 7V
R124 1K
R128 1. 8K
C117 150p 5%
Q101 *2
Y DIFFERENTIAL
11. 9V
11. 3V
6. 7V
R120 2. 2K
C116 39p 5%
L101 15
QQL01BK-150Z
D103 *3
R129 BW
R122 220
R123 47K
0V
Q108
2SC1906-T
VM SWITCH
R125 180
C102 .01 MY
R101 2. 7K
R102 15K
Q102 *1 VM AMP
1. 8V
7V
1. 1V
R104 82
C103 3. 3/50
R105 330
R103 1. 5K
K101 CE41492-0
Q103 *1
VM DRIVE
7. 4V
D151
1SS133-T2
7. 4V
K102
CE41492-001Z
C115 5p 5%
0V
Q1
VM



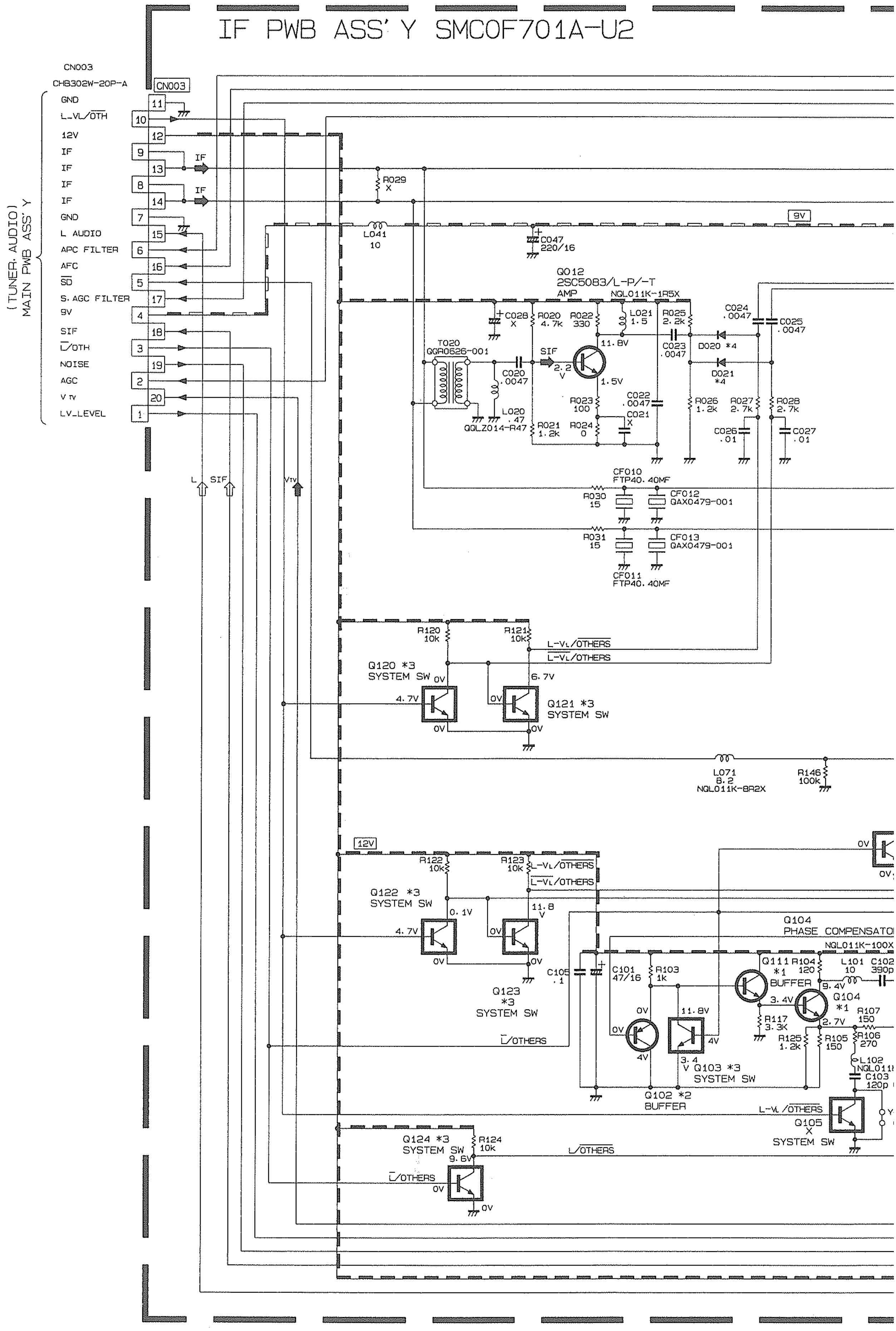
NOTE
*1: 2SC3311A(QR)-T
*2: 2SA1309A(QR)-T
*3: MA165-T2
*4: 1SS252-T2
BW: BUS WIRE
x : NON-MOUNT(OPEN)

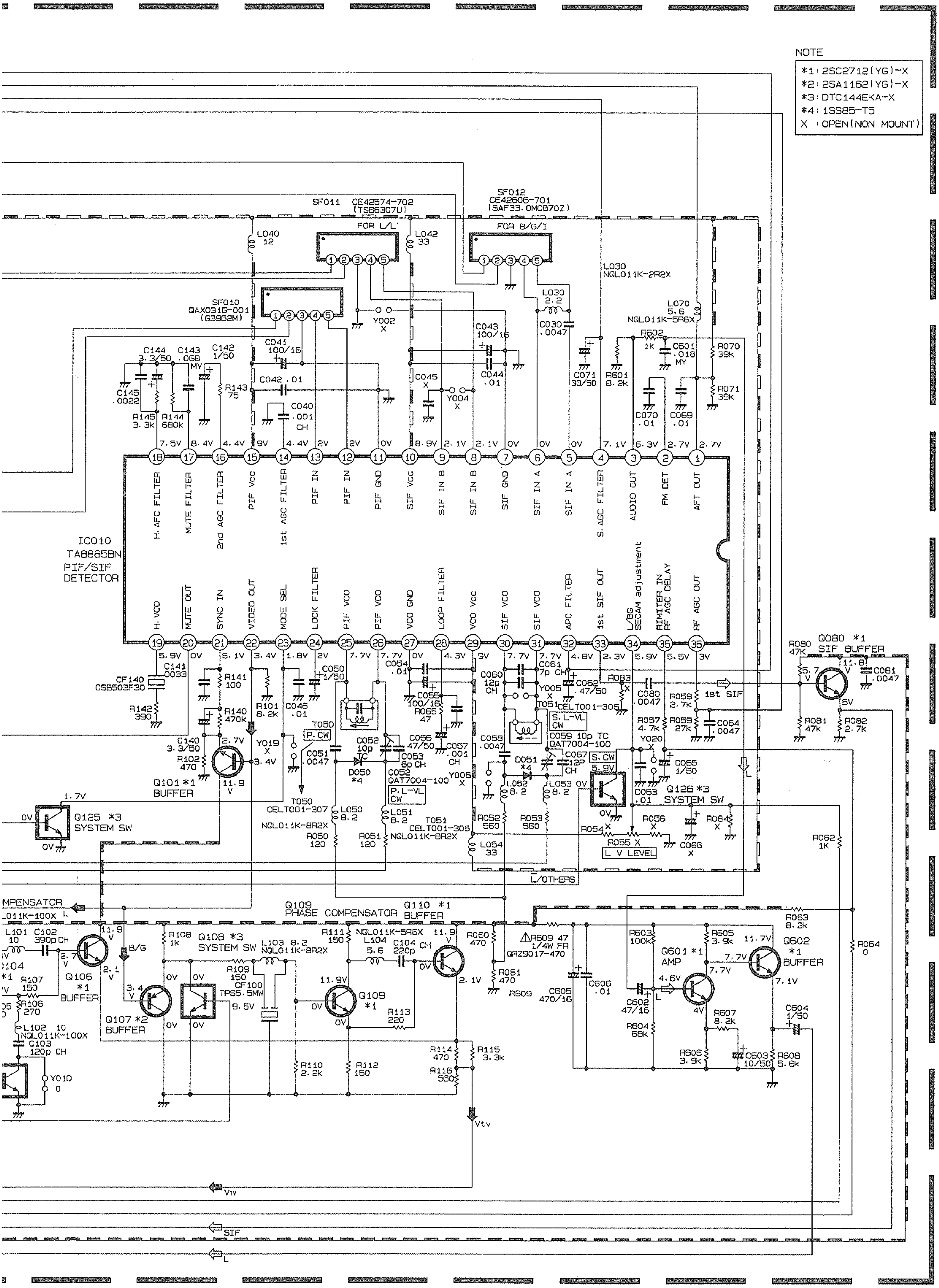
	V01(ITC) PICTURE TUBE
32"	W76ESF031X44
28"	W66ESF002X44

	SMC-3002A-U2	SMC-3003A-U2
SK001	CE42670-001 ⚠	CE42535-001J1 ⚠
R201	BW	BW
R202	BW	BW
R203	BW	BW
R212	X	X
R213	X	X
R214	X	X
C223	X	X

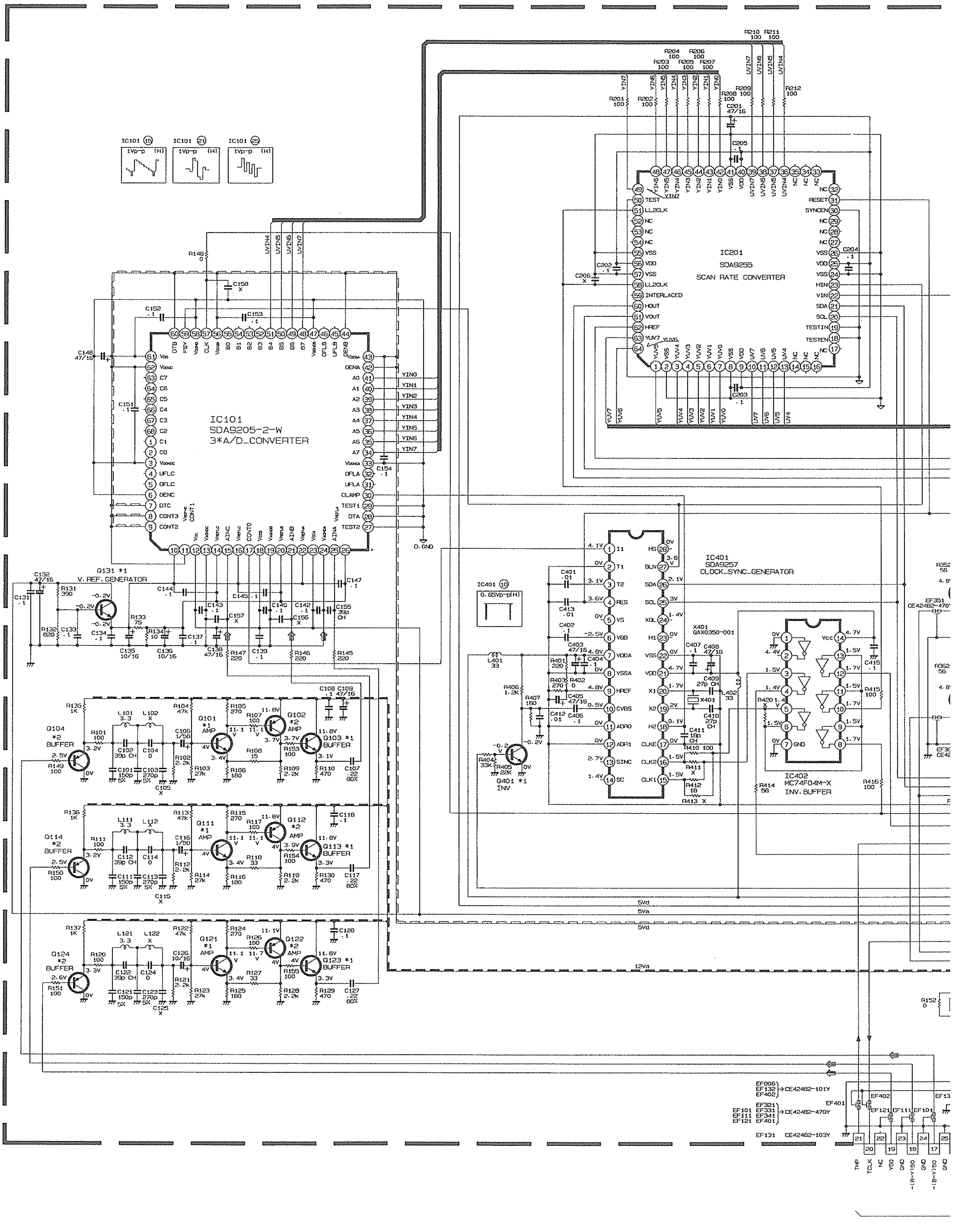
.1Q B-OUT
.1Q R-OUT
.1Q G-OUT
H203
CEHE002-001KH
H202
CEHE002-001KH
H201
CEHE002-001KH
9V 0V 9.5V 199.2V 136.5V 140.6V 136V
9V 0V 9.5V 199.2V 137V 140.4V 136.5V
9V 0V 9.5V 200V 141.1V 144.8V 140.6V
C209 .1 CC
C208 .1 CC
C207 .1 CC
D203 x
D202 x
D201 x
R237 1.5k 1/2S
R236 1.5k 1/2S
R235 1.5k 1/2S
R234 3.3K
R233 3.3K
R232 3.3K
C215 180p 5%
C214 180p 5%
C213 180p 5%
R231 82k 1W OMR
R230 82k 1W OMR
R229 82k 1W OMR
L203 4.7 QQL01BK-4R7Z
L202 4.7 QQL01BK-4R7Z
L201 4.7 QQL01BK-4R7Z
D206 EU01N-T2
D205 EU01N-T2
D204 EU01N-T2
C212 .1 QFK62EK-104Z
C211 .1 QFK62EK-104Z
C210 .1 QFK62EK-104Z
225 .8k
224 .8k
223 .8k
TP-47B
TP-E
⚠ SK001 *
④: NC
⑫: ARRESTER GND
B BK 11
R RK 8
G GK 6
⚠ V01
HV
FOCUS
SCREEN
H H 10 9
G1 G2 G3 5 7 1
CNOE1
K105 CE41433-001Z
(H) CRT GND
C222 x
R241 1M 1/2S
C221 10/250 QETN2EM-106Z
R240 1K 1/2S
D207 BW
(H)
R239 470K 1/2S
CNSCN
C219 .022 1.25KV MM QFZ0097-223 (H)
C217 x
R238 x
C218 33/250 QETM2EM-336
200V
(H)
HEATER
: LOW B GND
(H) : HIGH B GND
IC203 ⑧ 100Vp-p(2H)
IC202 ⑧ 125Vp-p(2H)
IC201 ⑧ 100Vp-p(2H)
FR
⚠ R109 560 1W_FR QRZ9021-561
K101 41492-001Z
C107 10/160
R110 820
R111 39
C111 100/10
R112 2.7 138.8V
D101 RH1S-T3
03 *1 DRIVE 11.9V
C104 100/16
.4V
S133-T2 7.7V
H001 CEHP00N-001Q
C108 .0047/500
R113 56K
138.2V
Q105 2SA1837 VM OUT
70.7V
V
CN00V CH41169-003Y
R107 47
C110 10/160
R114 56K
K103 CE41492-001Z
R119 390 2WA OMR
NC
3 2 1
VM COIL
C106 180p 5%
⚠ R106 10 QRJ146J-100X
K104 CE41492-001Z
C114 QCS32HJ-470Z
7V
H002 CEHP00N-001Q
70.7V
Q106 2SC4793 VM OUT
2.4V
.4V
R108 47
C109 .0047/500
C105 100p 5%
0V
1.7V
R116 2.7
D102 RH1S-T3
Q104 *2 VM DRIVE
115 5%
R115 820
R117 39
C112 100/10
R118 120
C113 330/10

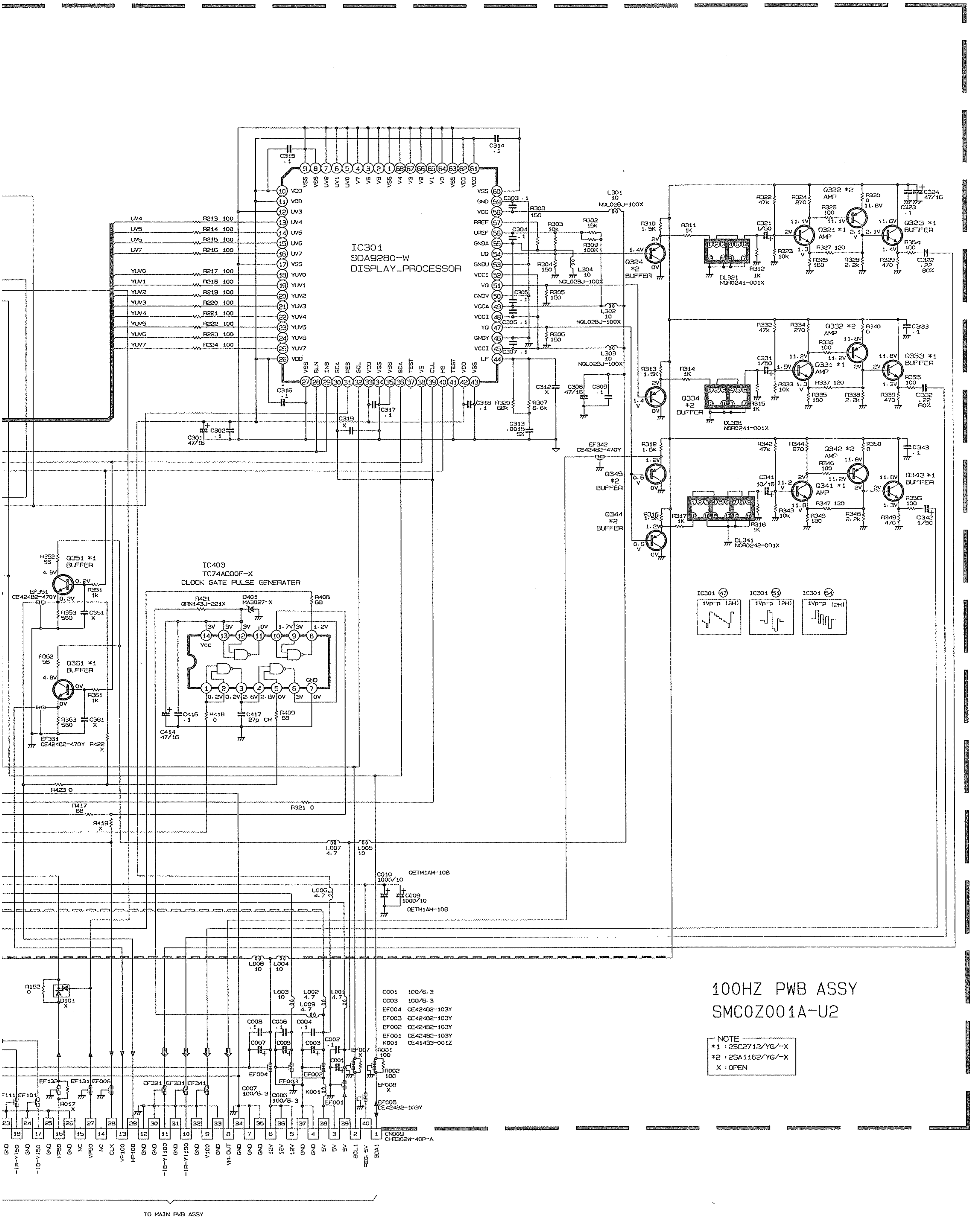
【 IF PWB CIRCUIT DIAGRAM 】


IF PWB ASS'Y SMC0F701A-U2
CN003
CHB302W-20P-A
(TUNER, AUDIO)
MAIN PWB ASS'Y
GND
L_VL/OTH
12V
IF
IF
IF
IF
GND
L AUDIO
APC FILTER
AFC
SD
S.AGC FILTER
9V
SIF
L/OTH
NOISE
AGC
V TV
LV_LEVEL
R029 X
L041 10
C047 220/16
9V
Q012
2SC5083/L-P/-T
AMP
NQL011K-1R5X
C028 X
R020 4.7k
R022 330
L021 1.5
R025 2.2k
C024 .0047
C025 .0047
T020
QQR0626-001
C020 .0047
SIF
2.2 V
11.8V
1.5V
C023 .0047
D020 *4
D021 *4
R023 100
C022 .0047
C021 X
R026 1.2k
R027 2.7k
R028 2.7k
C026 .01
C027 .01
L020 .47
QQLZ014-R47
R021 1.2k
R024 0
CF010 FTP40.40MF
R030 15
CF012 QAX0479-001
R031 15
CF013 QAX0479-001
CF011 FTP40.40MF
L SIF VTV
R120 10k
R121 10k
L-VL/OTHERS
L-VL/OTHERS
Q120 *3 SYSTEM SW
Q121 *3 SYSTEM SW
6.7V
4.7V
0V
L071 8.2
NQL011K-8R2X
R146 100k
12V
R122 10k
R123 10k
L-VL/OTHERS
L-VL/OTHERS
Q122 *3 SYSTEM SW
0.1V
11.8 V
4.7V
Q123 *3 SYSTEM SW
C105 .1
C101 47/16
R103 1k
Q104 PHASE COMPENSATOR
NQL011K-100X
Q111 *1 BUFFER
R104 120
L101 10
C102 390p
9.4V
3.4V
Q104 *1
R107 150
R117 3.3K
2.7V
R106 270
R125 1.2k
R105 150
L102 NQL011
C103 120p
11.8V
4V
3.4 V
Q103 *3 SYSTEM SW
Q102 *2 BUFFER
L/OTHERS
L-VL/OTHERS
Q105 X SYSTEM SW
Q124 *3 SYSTEM SW
R124 10k
9.6V
L/OTHERS
L/OTHERS
Y

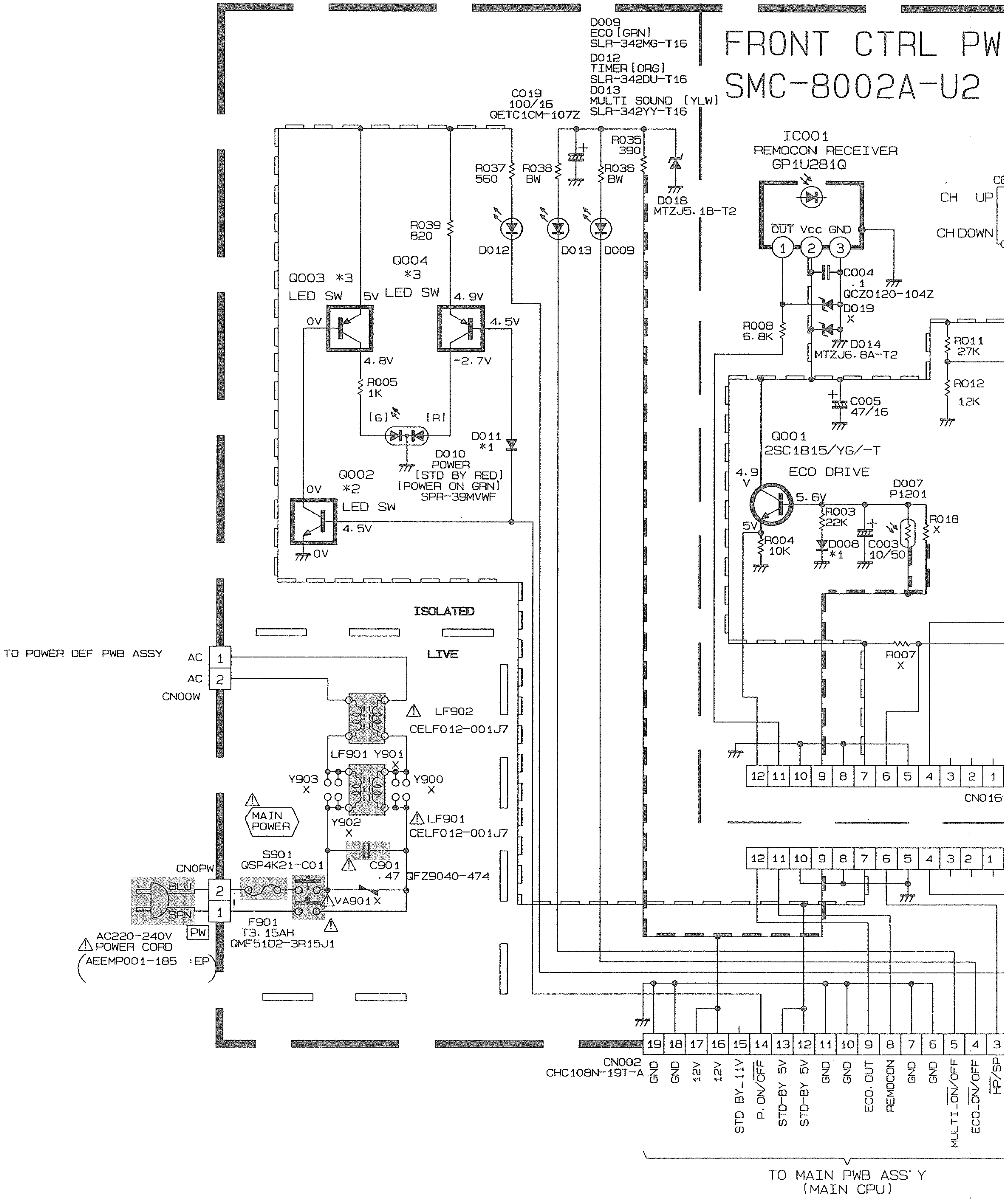

NOTE
*1: 2SC2712(YG)-X
*2: 2SA1162(YG)-X
*3: DTC144EKA-X
*4: 1SS85-T5
X : OPEN(NON MOUNT)
SF011 CE42574-702 (TSB6307U)
FOR L/L'
SF012 CE42606-701 (SAF33.0MCB70Z)
FOR B/G/I
SF010 QAX0316-001 (G3962M)
L030 NQL011K-2R2X
L070 5.6 NQL011K-5R6X
IC010 TA8865BN PIF/SIF DETECTOR
H.AFC FILTER
MUTE FILTER
2nd AGC FILTER
PIF Vcc
1st AGC FILTER
PIF IN
PIF GND
SIF Vcc
SIF IN B
SIF GND
SIF IN A
S.AGC FILTER
AUDIO OUT
FM DET
AFT OUT
H.VCO
MUTE OUT
SYNC IN
VIDEO OUT
MODE SEL
LOCK FILTER
PIF VCO
VCO GND
LOOP FILTER
VCO Vcc
SIF VCO
APC FILTER
1st SIF OUT
L/BG SECAM adjustment
RIMITER IN RF AGC DELAY
RF AGC OUT
CF140 CSB503F30
Q101 *1 BUFFER
Q125 *3 SYSTEM SW
T050 CELT001-307
P.CW
P.L-VL CW
T051 CELT001-306
S.L-VL CW
S.CW
Q126 *3 SYSTEM SW
L V LEVEL
L/OTHERS
Q080 *1 SIF BUFFER
1st SIF
Q109 PHASE COMPENSATOR
Q110 *1 BUFFER
Q106 *1 BUFFER
Q107 *2 BUFFER
Q108 *3 SYSTEM SW
CF100 TPS5.5MW
B/G
R609 47 1/4W FR QRZ9017-470
Q601 *1 AMP
Q602 *1 BUFFER
Vtv
SIF
L

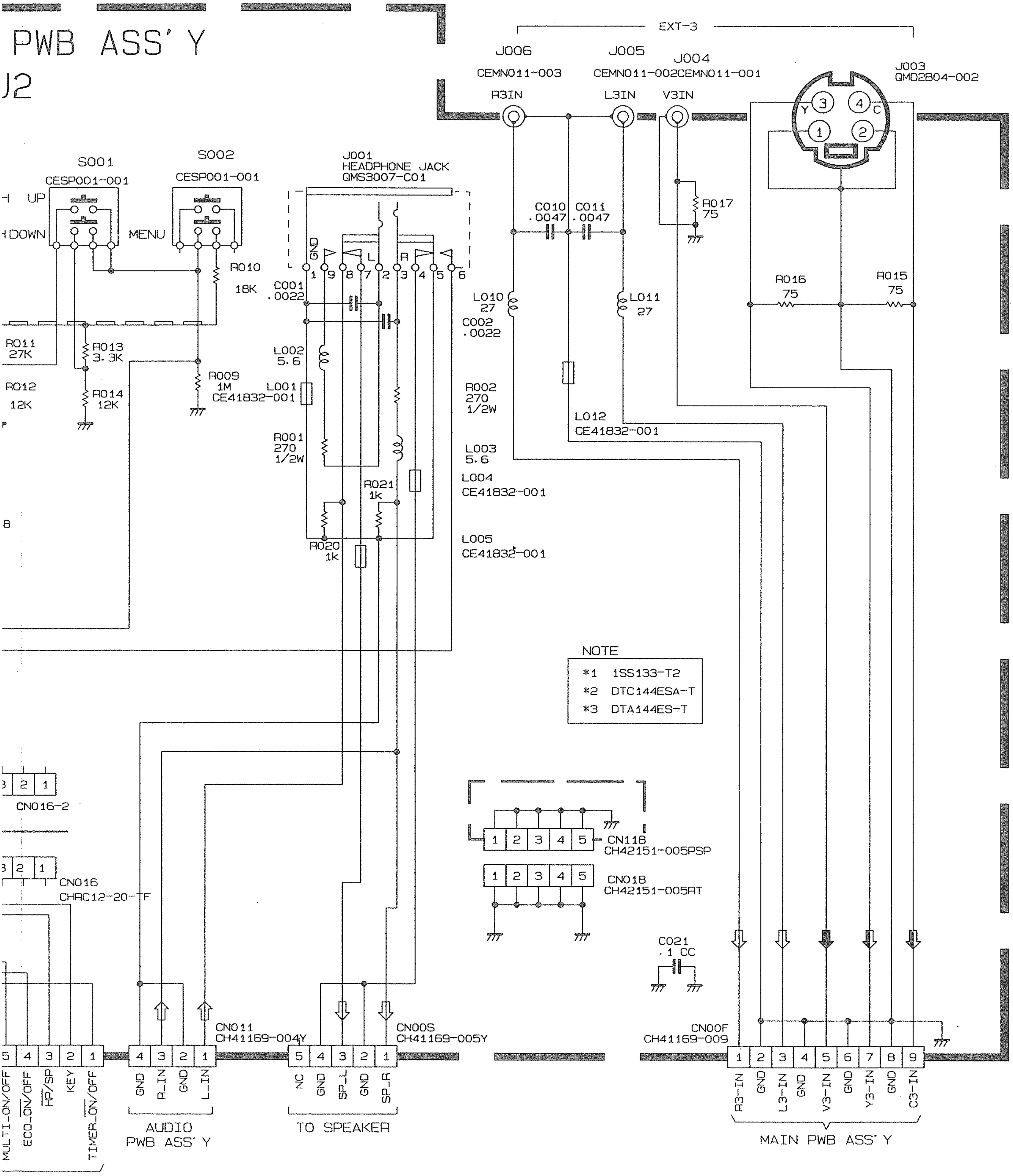
【 100Hz PWB CIRCUIT DIAGRAM 】


IC101 ⑮
IC101 ㉑
IC101 ㉕
1Vp-p (H)
IC101
SDA9205-2-W
3*A/D_CONVERTER
IC201
SDA9255
SCAN RATE CONVERTER
IC401
SDA9257
CLOCK_SYNC_GENERATOR
IC402
MC74F04M-X
INV. BUFFER
IC401 ⑩
0.65Vp-p(H)
Q131 *1
V. REF. GENERATOR
Q101 *1 AMP
Q102 *2 AMP
Q103 *1 BUFFER
Q104 *2 BUFFER
Q111 *1 AMP
Q112 *2 AMP
Q113 *1 BUFFER
Q114 *2 BUFFER
Q121 *1 AMP
Q122 *2 AMP
Q123 *1 BUFFER
Q124 *2 BUFFER
Q401 *1 INV
X401 QAX0350-001
YIN0
YIN1
YIN2
YIN3
YIN4
YIN5
YIN6
YIN7
UVIN4
UVIN5
UVIN6
UVIN7
0.GND
5Vd
5Va
12Va
EF006
EF132
EF402
CE42482-101Y
EF321
EF331
EF341
EF401
CE42482-470Y
EF101
EF111
EF121
EF131
CE42482-103Y
THP
TCLK
NC
YSO
-(R-Y)SO
GND
-(B-Y)SO
GND

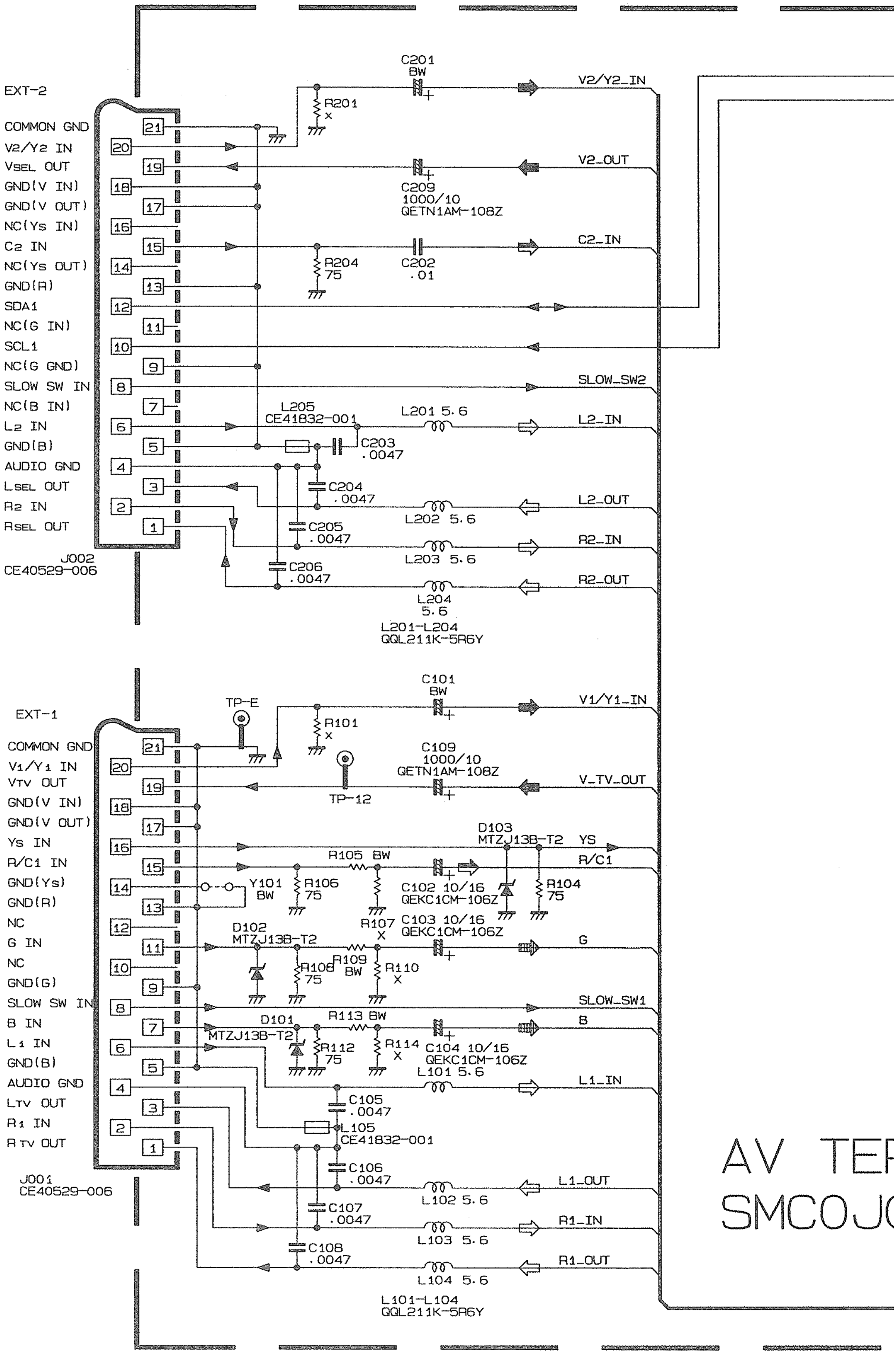

IC301
SDA9280-W
DISPLAY_PROCESSOR
IC403
TC74AC00F-X
CLOCK GATE PULSE GENERATER
Q351 *1 BUFFER
Q361 *1 BUFFER
Q321 *1 AMP
Q322 *2 AMP
Q323 *1 BUFFER
Q324 *2 BUFFER
Q331 *1 AMP
Q332 *2 AMP
Q333 *1 BUFFER
Q334 *2 BUFFER
Q341 *1 AMP
Q342 *2 AMP
Q343 *1 BUFFER
Q344 *2 BUFFER
Q345 *2 BUFFER
DL321 NQR0241-001X
DL331 NQR0241-001X
DL341 NQR0242-001X
IC301 (47) 1Vp-p (2H)
IC301 (51) 1Vp-p (2H)
IC301 (54) 1Vp-p (2H)
100HZ PWB ASSY
SMC0Z001A-U2
NOTE
*1 : 2SC2712/YG/-X
*2 : 2SA1162/YG/-X
X : OPEN
CN009 CHB302W-40P-A
TO MAIN PWB ASSY

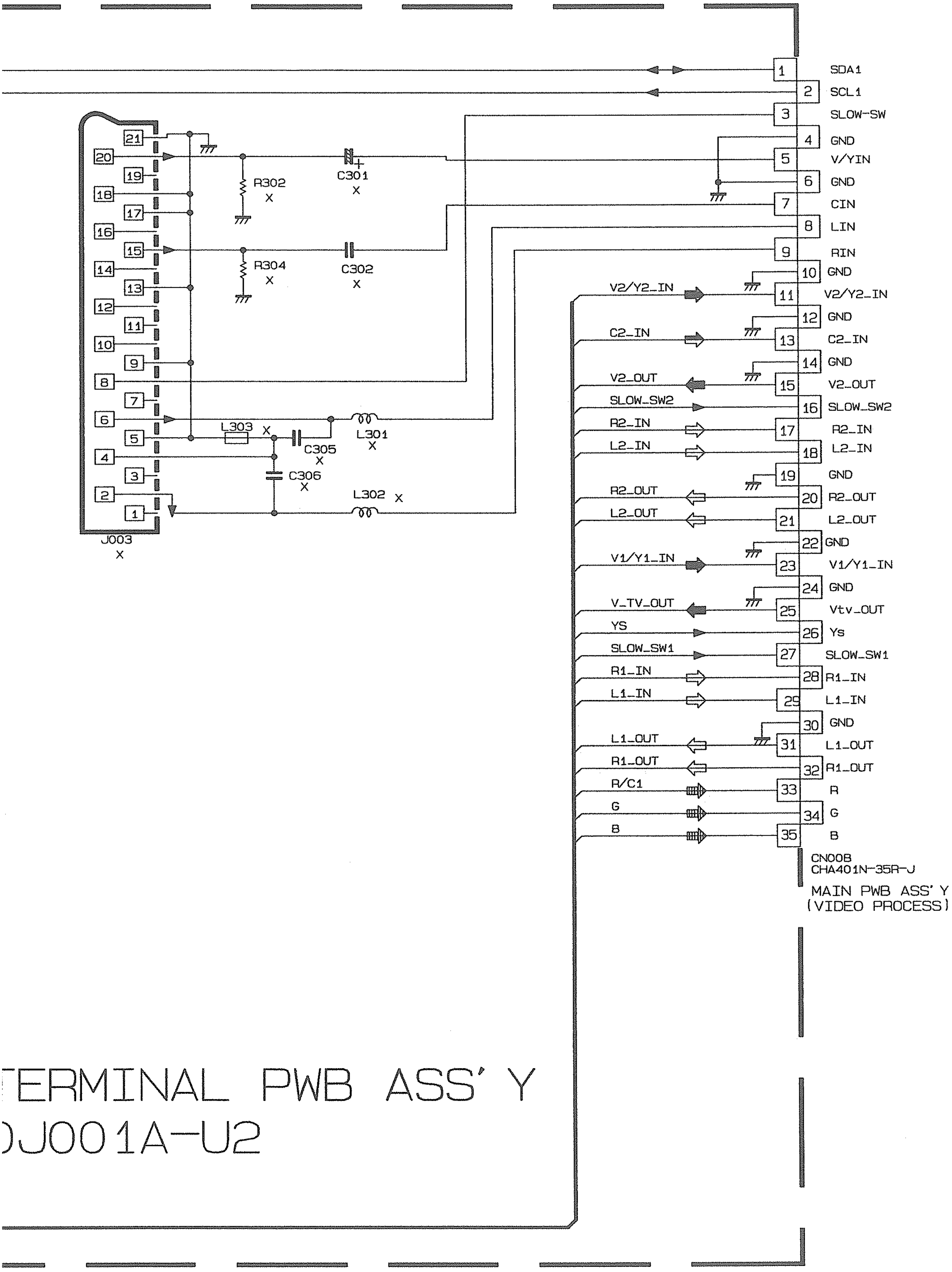
【 FRONT CONTROL PWB CIRCUIT DIAGRAM 】


FRONT CTRL PW
SMC-8002A-U2
D009
ECO [GRN]
SLR-342MG-T16
D012
TIMER [ORG]
SLR-342DU-T16
D013
MULTI SOUND [YLW]
SLR-342YY-T16
C019
100/16
QETC1CM-107Z
R035
390
R037
560
R038
BW
R036
BW
D018
MTZJ5. 1B-T2
R039
820
D012
D013
D009
Q003 *3
LED SW
Q004
*3
LED SW
5V
4. 9V
0V
4. 5V
4. 8V
-2. 7V
R005
1K
[G]
[R]
D011
*1
D010
POWER
[STD BY RED]
[POWER ON GRN]
SPR-39MVWF
Q002
*2
LED SW
0V
4. 5V
0V
IC001
REMOCON RECEIVER
GP1U281Q
OUT Vcc GND
1
2
3
C004
. 1
QCZ0120-104Z
D019
X
R008
6. 8K
D014
MTZJ6. 8A-T2
R011
27K
R012
12K
C005
47/16
CH UP
CH DOWN
Q001
2SC1815/YG/-T
ECO DRIVE
4. 9
V
5. 6V
5V
R003
22K
R004
10K
D008
*1
C003
10/50
D007
P1201
R018
X
R007
X
12 11 10 9 8 7 6 5 4 3 2 1
CN016
12 11 10 9 8 7 6 5 4 3 2 1
ISOLATED
LIVE
TO POWER DEF PWB ASSY
AC 1
AC 2
CN00W
LF902
CELF012-001J7
LF901 Y901
X
Y903
X
Y900
X
Y902
X
LF901
CELF012-001J7
MAIN
POWER
S901
QSP4K21-C01
C901
. 47
QFZ9040-474
VA901 X
CN0PW
BLU 2
BRN 1
PW
F901
T3. 15AH
QMF51D2-3R15J1
AC220~240V
POWER CORD
(AEEMP001-185 :EP)
19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3
CN002
CHC108N-19T-A
GND
GND
12V
12V
STD BY_11V
P. ON/OFF
STD-BY 5V
STD-BY 5V
GND
GND
ECO. OUT
REMOCON
GND
GND
MULTI_ON/OFF
ECO_ON/OFF
HP/SP
TO MAIN PWB ASS' Y
(MAIN CPU)


PWB ASS' Y
J2
S001
CESP001-001
UP
DOWN
S002
CESP001-001
MENU
R010
18K
R011
27K
R013
3.3K
R012
12K
R014
12K
R009
1M
8
J001
HEADPHONE JACK
QMS3007-C01
GND
L
R
1 9 8 7 2 3 4 5 6
C001
.0022
L002
5.6
L001
CE41832-001
R001
270
1/2W
R021
1K
R020
1K
L010
27
C002
.0022
R002
270
1/2W
L003
5.6
L004
CE41832-001
L005
CE41832-001
EXT-3
J006
CEMN011-003
R3IN
J005
CEMN011-002
L3IN
J004
CEMN011-001
V3IN
J003
QMD2B04-002
Y
C
C010
.0047
C011
.0047
R017
75
L011
27
L012
CE41832-001
R016
75
R015
75
NOTE
*1 1SS133-T2
*2 DTC144ESA-T
*3 DTA144ES-T
CN016-2
CN016
CHRC12-20-TF
CN118
CH42151-005PSP
CN018
CH42151-005RT
C021
.1 CC
CN011
CH41169-004Y
CN005
CH41169-005Y
CN00F
CH41169-009
MULTI_ON/OFF
ECO_ON/OFF
HP/SP
KEY
TIMER_ON/OFF
GND
R_IN
GND
L_IN
AUDIO
PWB ASS' Y
NC
GND
SP_L
GND
SP_R
TO SPEAKER
R3-IN
GND
L3-IN
GND
V3-IN
GND
Y3-IN
GND
C3-IN
MAIN PWB ASS' Y

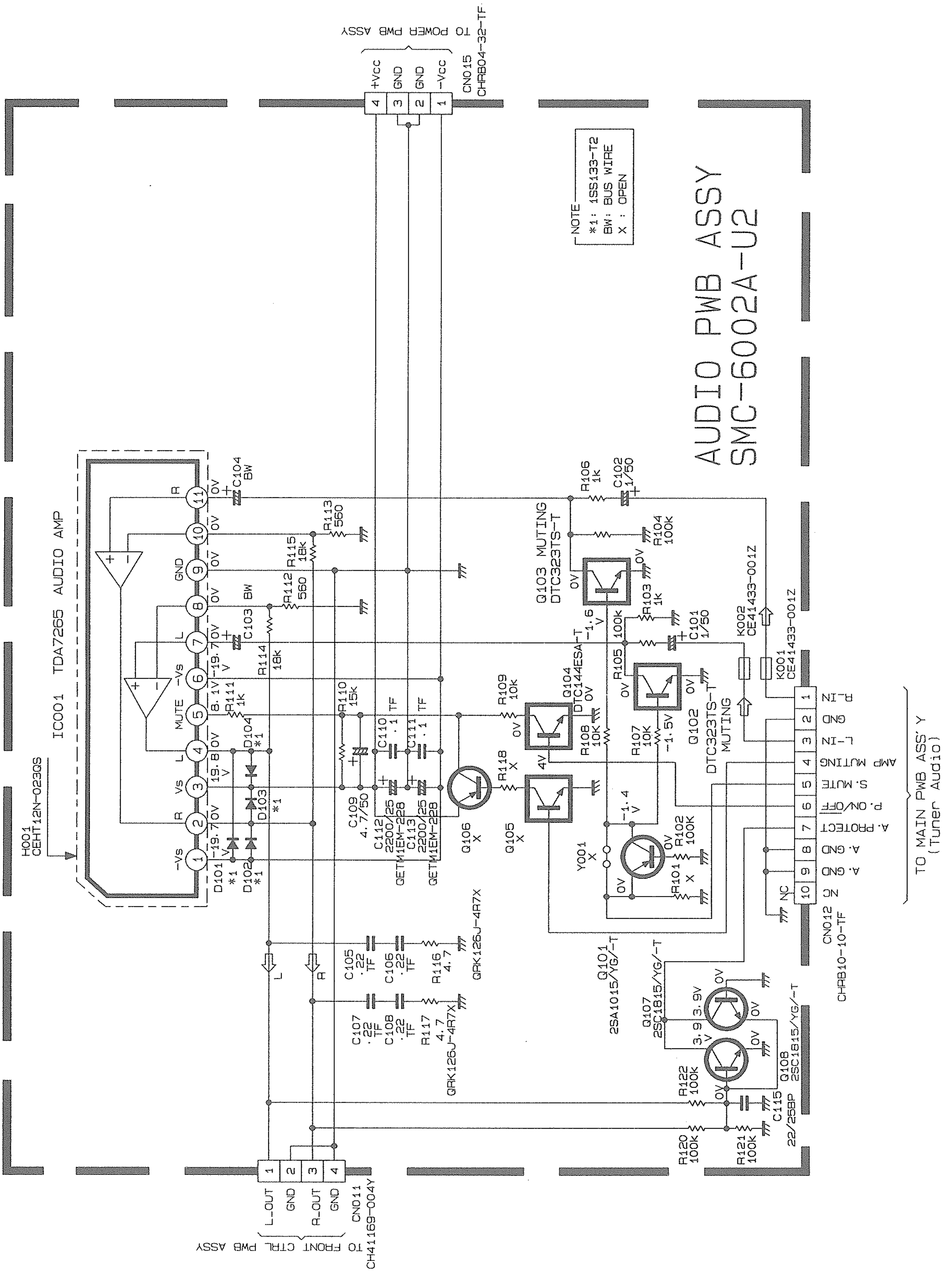
【 AV TERMINAL PWB CIRCUIT DIAGRAM 】


EXT-2
COMMON GND
V2/Y2 IN
VSEL OUT
GND(V IN)
GND(V OUT)
NC(YS IN)
C2 IN
NC(YS OUT)
GND(R)
SDA1
NC(G IN)
SCL1
NC(G GND)
SLOW SW IN
NC(B IN)
L2 IN
GND(B)
AUDIO GND
LSEL OUT
R2 IN
RSEL OUT
J002
CE40529-006
C201
BW
R201
X
V2/Y2_IN
V2_OUT
C209
1000/10
QETN1AM-108Z
C2_IN
R204
75
C202
.01
SLOW_SW2
L205
CE41832-001
L201 5.6
L2_IN
C203
.0047
C204
.0047
L2_OUT
L202 5.6
C205
.0047
R2_IN
L203 5.6
C206
.0047
R2_OUT
L204
5.6
L201-L204
QQL211K-5R6Y
EXT-1
COMMON GND
V1/Y1 IN
VTV OUT
GND(V IN)
GND(V OUT)
YS IN
R/C1 IN
GND(YS)
GND(R)
NC
G IN
NC
GND(G)
SLOW SW IN
B IN
L1 IN
GND(B)
AUDIO GND
LTV OUT
R1 IN
RTV OUT
J001
CE40529-006
TP-E
C101
BW
R101
X
V1/Y1_IN
C109
1000/10
QETN1AM-108Z
V_TV_OUT
TP-12
D103
MTZJ13B-T2
YS
R105 BW
R/C1
Y101
BW
R106
75
C102 10/16
QEKC1CM-106Z
R104
75
R107
X
C103 10/16
QEKC1CM-106Z
D102
MTZJ13B-T2
G
R108
75
R109
BW
R110
X
SLOW_SW1
D101
R113 BW
B
MTZJ13B-T2
R112
75
R114
X
C104 10/16
QEKC1CM-106Z
L101 5.6
L1_IN
C105
.0047
L105
CE41832-001
C106
.0047
L1_OUT
L102 5.6
C107
.0047
R1_IN
L103 5.6
C108
.0047
R1_OUT
L104 5.6
L101-L104
QQL211K-5R6Y
AV TE
SMC0J

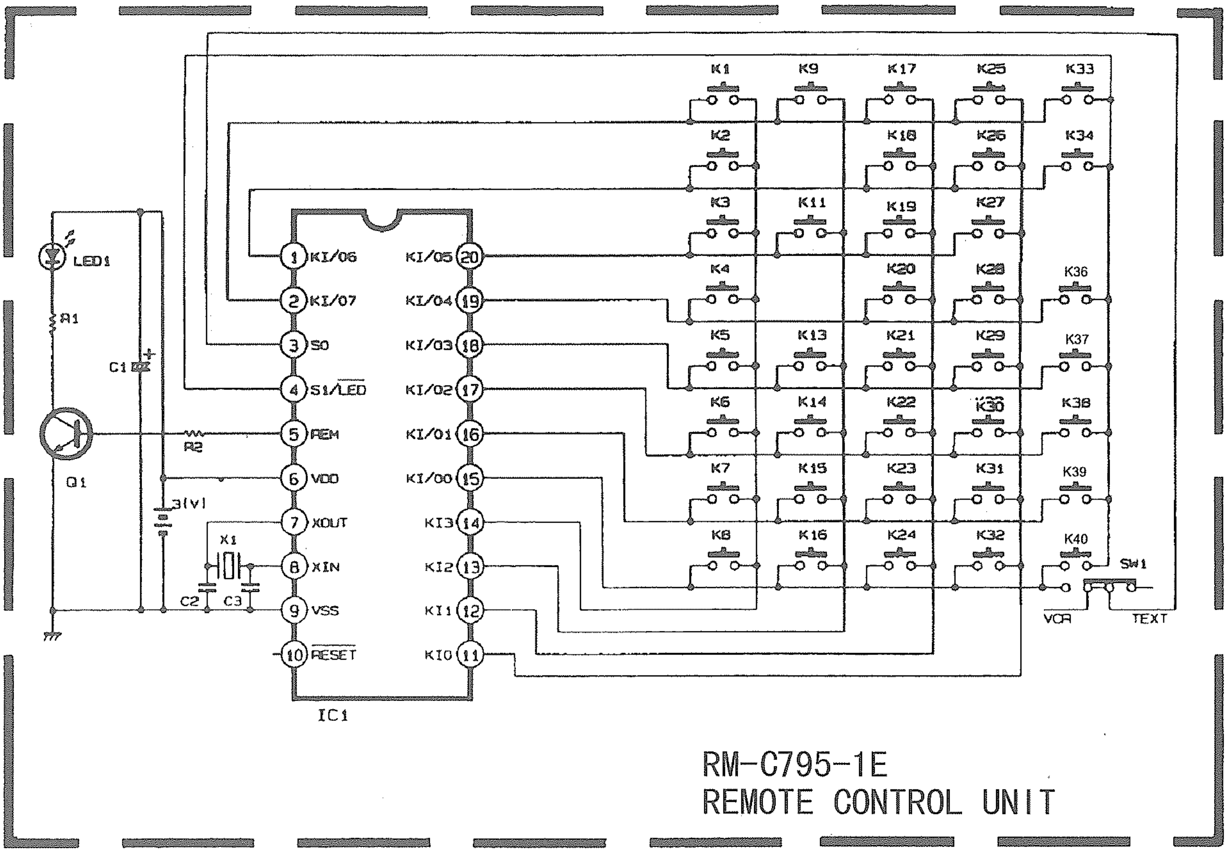

1
SDA1
2
SCL1
3
SLOW-SW
4
GND
5
V/YIN
6
GND
7
CIN
8
LIN
9
RIN
10
GND
V2/Y2_IN
11
V2/Y2_IN
12
GND
C2_IN
13
C2_IN
14
GND
V2_OUT
15
V2_OUT
SLOW_SW2
16
SLOW_SW2
R2_IN
17
R2_IN
L2_IN
18
L2_IN
19
GND
R2_OUT
20
R2_OUT
L2_OUT
21
L2_OUT
22
GND
V1/Y1_IN
23
V1/Y1_IN
24
GND
V_TV_OUT
25
Vtv_OUT
YS
26
Ys
SLOW_SW1
27
SLOW_SW1
R1_IN
28
R1_IN
L1_IN
29
L1_IN
30
GND
L1_OUT
31
L1_OUT
R1_OUT
32
R1_OUT
R/C1
33
R
G
34
G
B
35
B
CN008
CHA401N-35R-J
MAIN PWB ASS' Y
(VIDEO PROCESS)
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
J003
X
R302
X
C301
X
R304
X
C302
X
L303
X
C305
X
L301
X
C306
X
L302
X

ERMINAL PWB ASS' Y
J001A-U2

【 AUDIO PWB CIRCUIT DIAGRAM 】


TO POWER PWB ASSY
+Vcc
GND
GND
-Vcc
CN015
CHRB04-32-TF
NOTE
*1: 1SS133-T2
BW: BUS WIRE
X : OPEN
AUDIO PWB ASSY
SMC-6002A-U2
IC001 TDA7265 AUDIO AMP
H001
CEHT12N-023GS
-Vs
R
Vs
L
MUTE
-Vs
L
GND
R
C104
BW
C103
BW
R113
560
R115
18k
R112
560
R114
18k
R111
1k
R110
15k
D101
D102
D103
D104
*1
C109
4.7/50
C110
.1
TF
C111
.1
TF
C112
2200/25
QETM1EM-228
C113
2200/25
QETM1EM-228
Q106
X
R109
10k
R118
X
Q104
DTC144ESA-T
Q105
X
R108
10K
R107
10K
Q102
DTC323TS-T
MUTING
Q103 MUTING
DTC323TS-T
R106
1k
C102
1/50
R104
100k
R103
1k
R105
100k
C101
1/50
K002
CE41433-001Z
K001
CE41433-001Z
Y001
X
Q101
2SA1015/YG/-T
R102
100K
R101
X
C105
.22
TF
C106
.22
TF
R116
4.7
QRK126J-4R7X
C107
.22
TF
C108
.22
TF
R117
4.7
QRK126J-4R7X
Q107
2SC1815/YG/-T
Q108
2SC1815/YG/-T
R122
100k
C115
22/25BP
R120
100k
R121
100k
R-IN
GND
L-IN
AMP MUTING
S.MUTE
P.ON/OFF
A.PROTECT
A.GND
A.GND
NC
CN012
CHRB10-10-TF
TO MAIN PWB ASS'Y
(Tuner Audio)
L_OUT
GND
R_OUT
GND
CN011
CH41169-004Y
TO FRONT CTRL PWB ASSY
-19.7V
19.8V
8.1V
-1.6V
-1.5V
-1.4V
3.9V
4V
0V

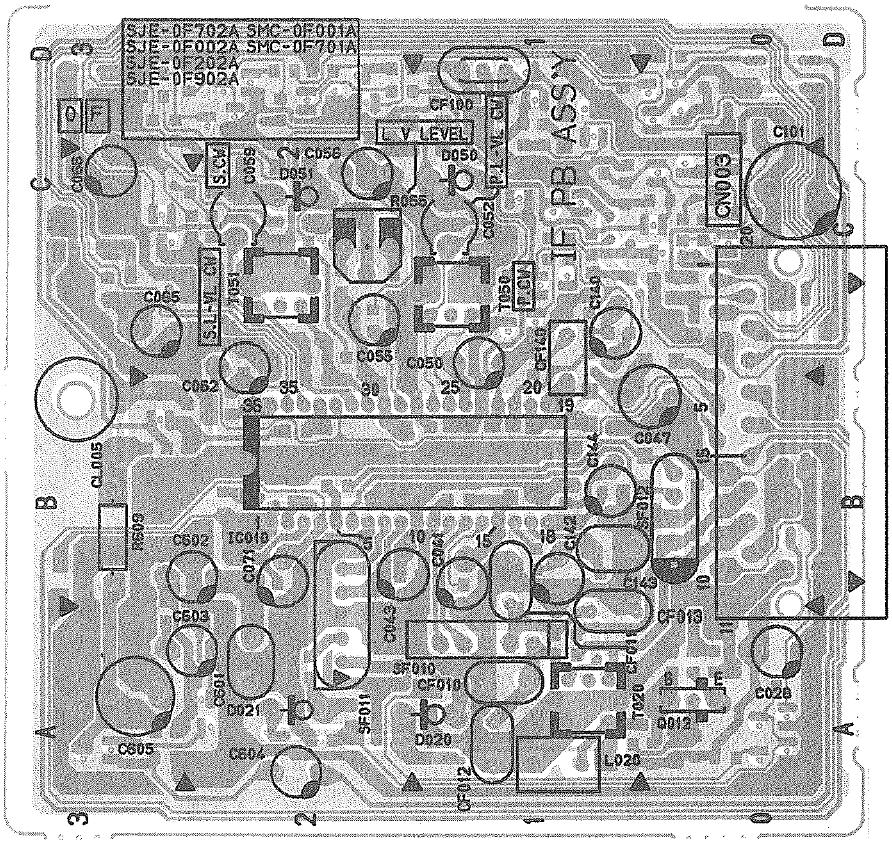
【 REMOTE CONTROL UNIT CIRCUIT DIAGRAM 】


LED1
R1
C1
Q1
R2
3(V)
X1
C2
C3
1 KI/06
2 KI/07
3 S0
4 S1/LED
5 REM
6 VDD
7 XOUT
8 XIN
9 VSS
10 RESET
KI/05 20
KI/04 19
KI/03 18
KI/02 17
KI/01 16
KI/00 15
KI3 14
KI2 13
KI1 12
KI0 11
IC1
K1
K2
K3
K4
K5
K6
K7
K8
K9
K11
K13
K14
K15
K16
K17
K18
K19
K20
K21
K22
K23
K24
K25
K26
K27
K28
K29
K30
K31
K32
K33
K34
K36
K37
K38
K39
K40
SW1
VCR
TEXT
RM-C795-1E
REMOTE CONTROL UNIT

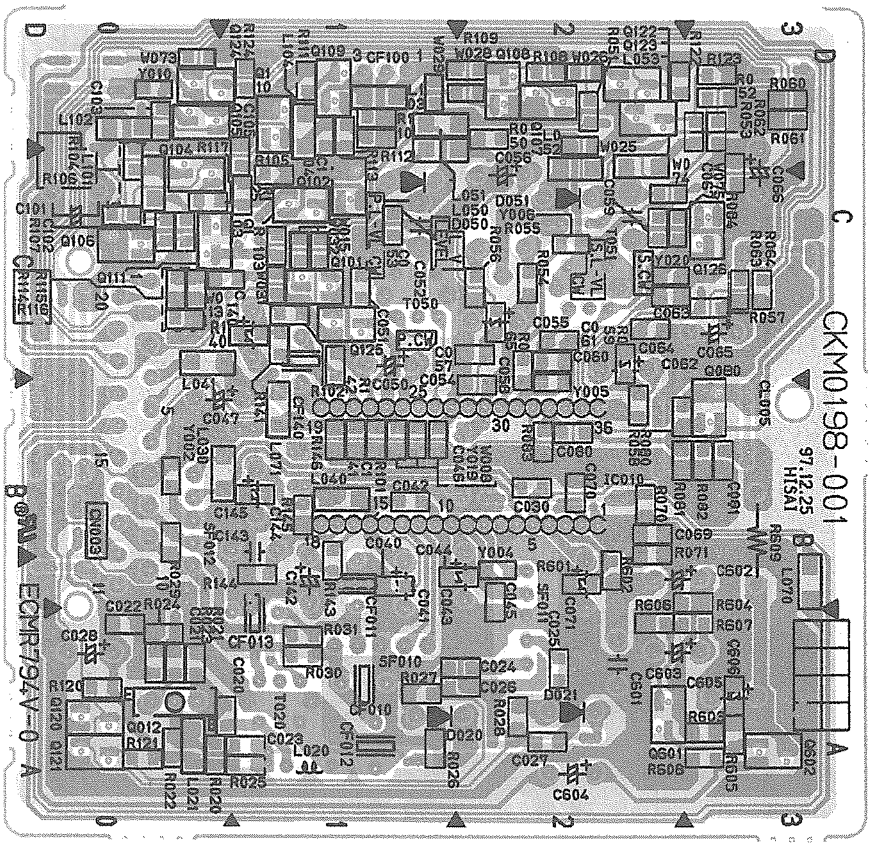
■ KEY FUNCTION

No.	Key Name	No.	Key Name	No.	Key Name	No.	Key Name
1	1	14	3D ⟷ (GREEN)	22	MODE (TEXT)	29	CANCEL (TEXT)
2	2	15	P.BASS (YELLOW)		REW ◀◀ (VCR)		STOP ■ (VCR)
3	3	16	PIP (BLUE)	23	SIZE (TEXT)	30	INDEX (TEXT)
4	4	17	ⓘ		FF ▶▶ (VCR)		(')/| (VCR)
5	5	18	REVEAL (TEXT)	24	SUB PAGE(TEXT)	31	▲
6	6		PLAY ▶ (VCR)		P ∨ (VCR)	32	◀
7	7	19	TV	25	🔇	33	▼
8	8	20	MENU/OK	26	STORE (TEXT)	34	▶
9	9	21	HOLD (TEXT)		(VCR)	36	FREEZE
11	0		P ∧ (VCR)	27	(')/|		
13	ZOOM (RED)			28	⊟		

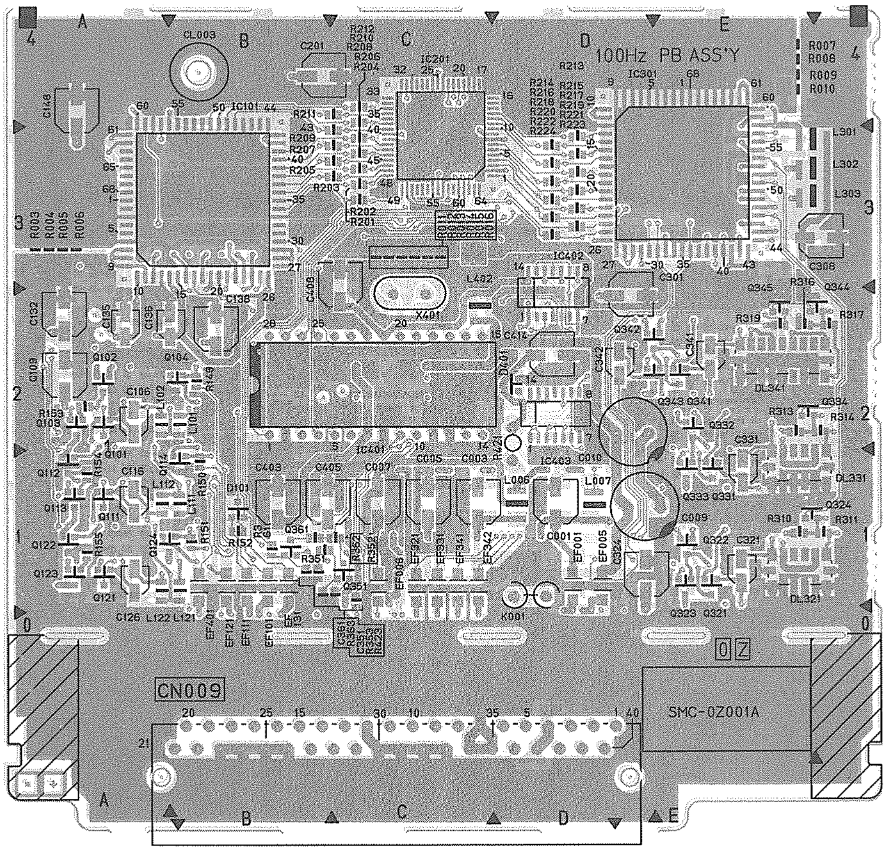
【 IF PWB PATTERN(TOP) 】


SJE-0F702A SMC-0F001A
SJE-0F002A SMC-0F701A
SJE-0F202A
SJE-0F902A
L V LEVEL
IF PB ASS'Y
CN003
C101
IC010
CF100
T051
T050
L020
Q012
CF013
SF010
SF011
SF012
D050
D051
D020
D021
C605
C604
C603
C602
R609
CL005
A
B
C
D
0
1
2
3

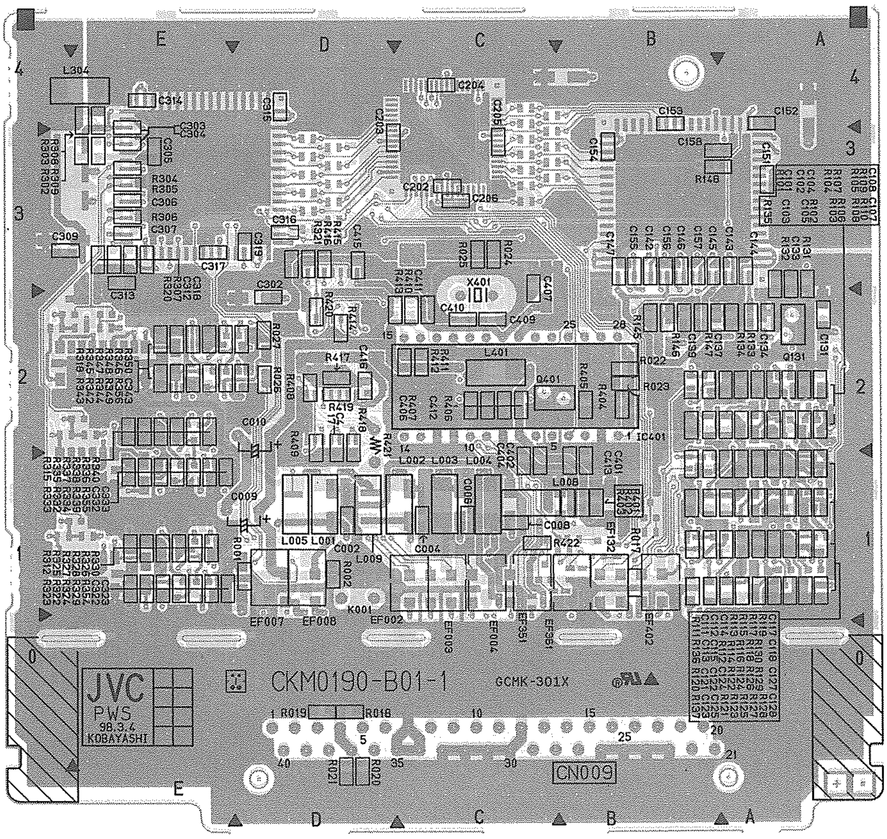
【 IF PWB PATTERN(BOTTOM) 】


CKM0198-001
97.12.25
HISAI
ECMR794V-0 A
CN003
IC010
CF100
CF010
CF012
CF013
T050
T051
L020
Q012
Y004
Y005
A
B
C
D
0
1
2
3

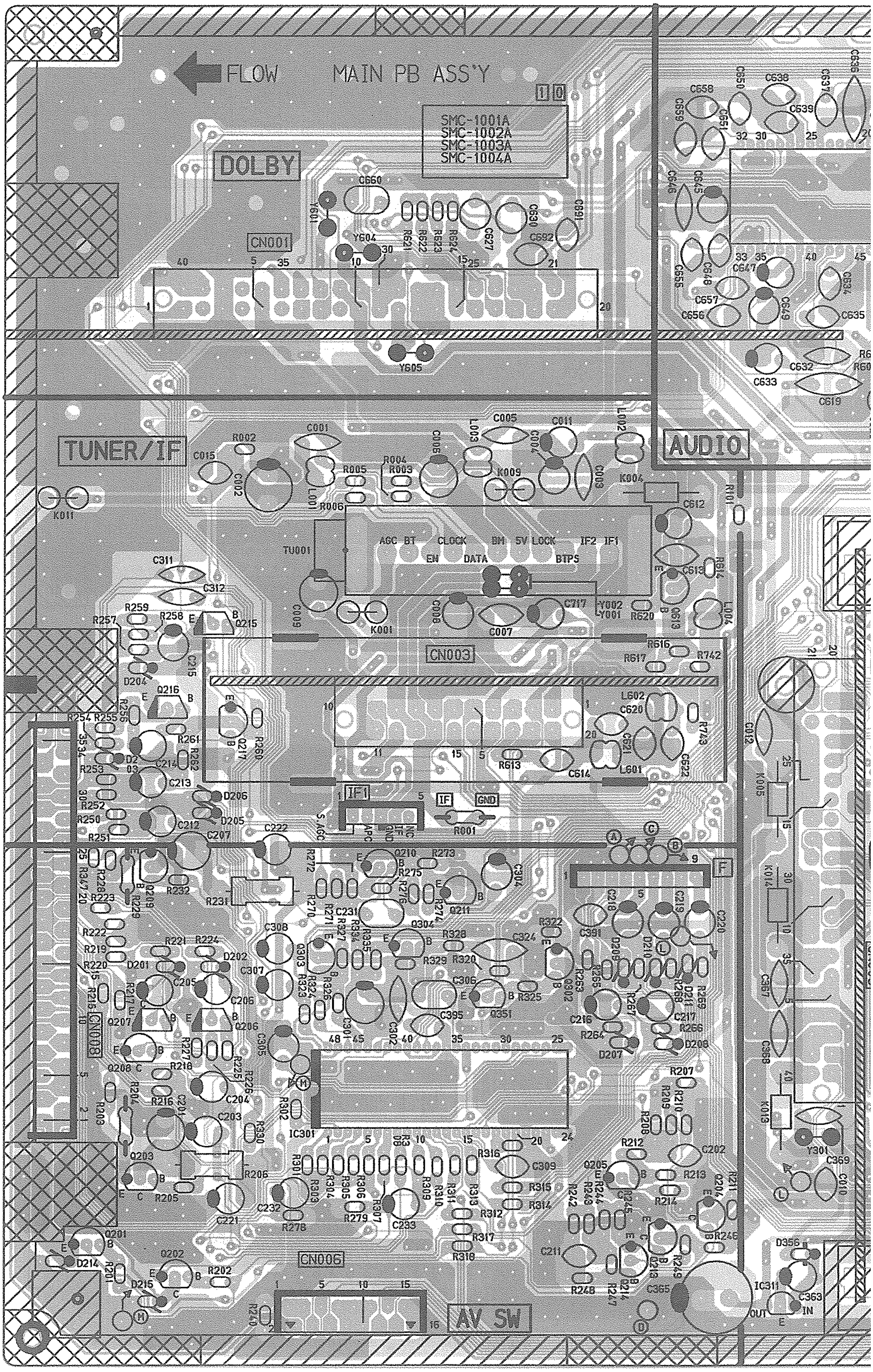
【 100Hz PWB PATTERN(TOP) 】

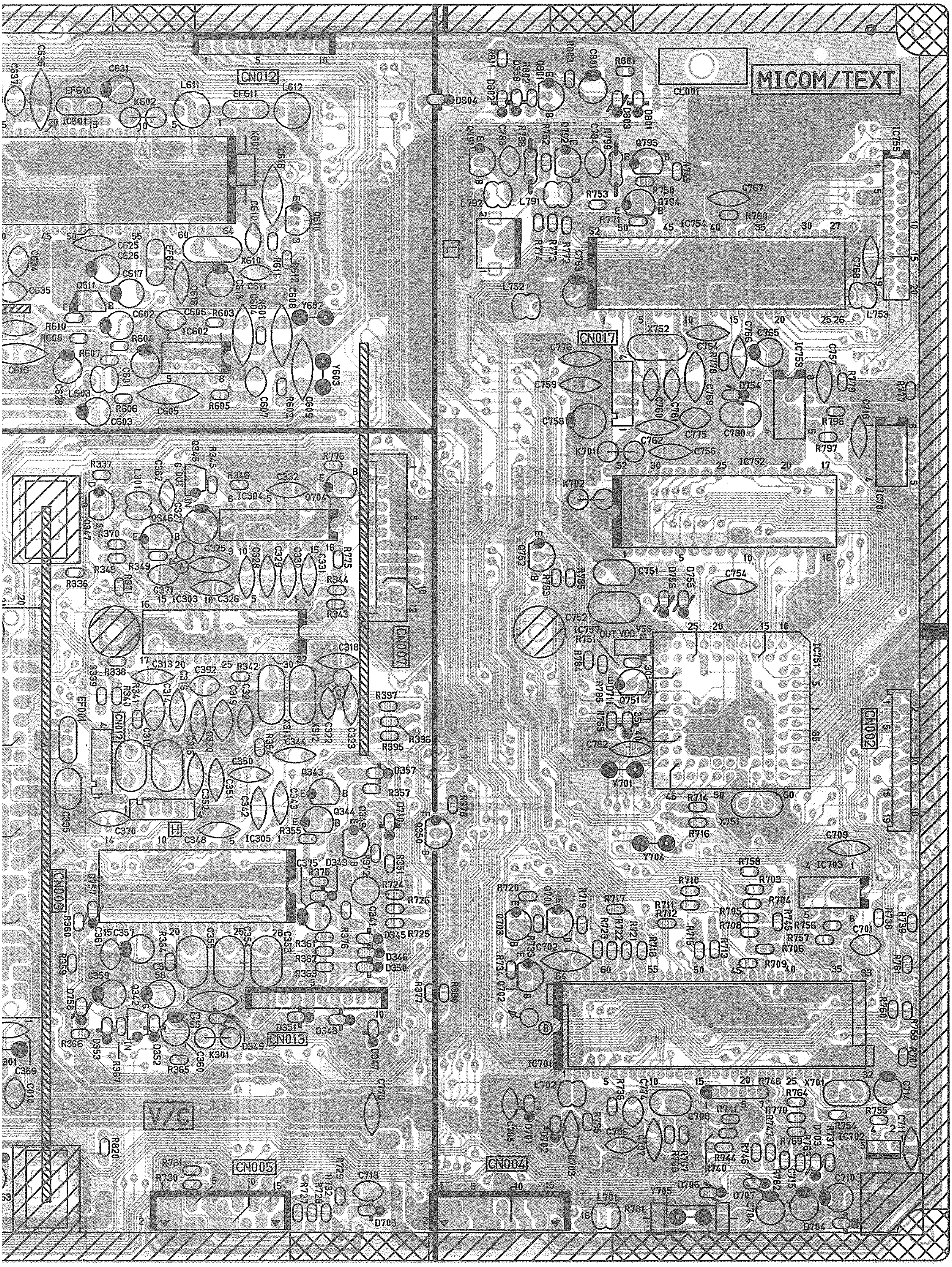

100Hz PB ASS'Y
IC101
IC201
IC301
IC401
IC402
IC403
X401
CN009
SMC-0Z001A
0Z
A
B
C
D
E

【 100Hz PWB PATTERN(BOTTOM) 】

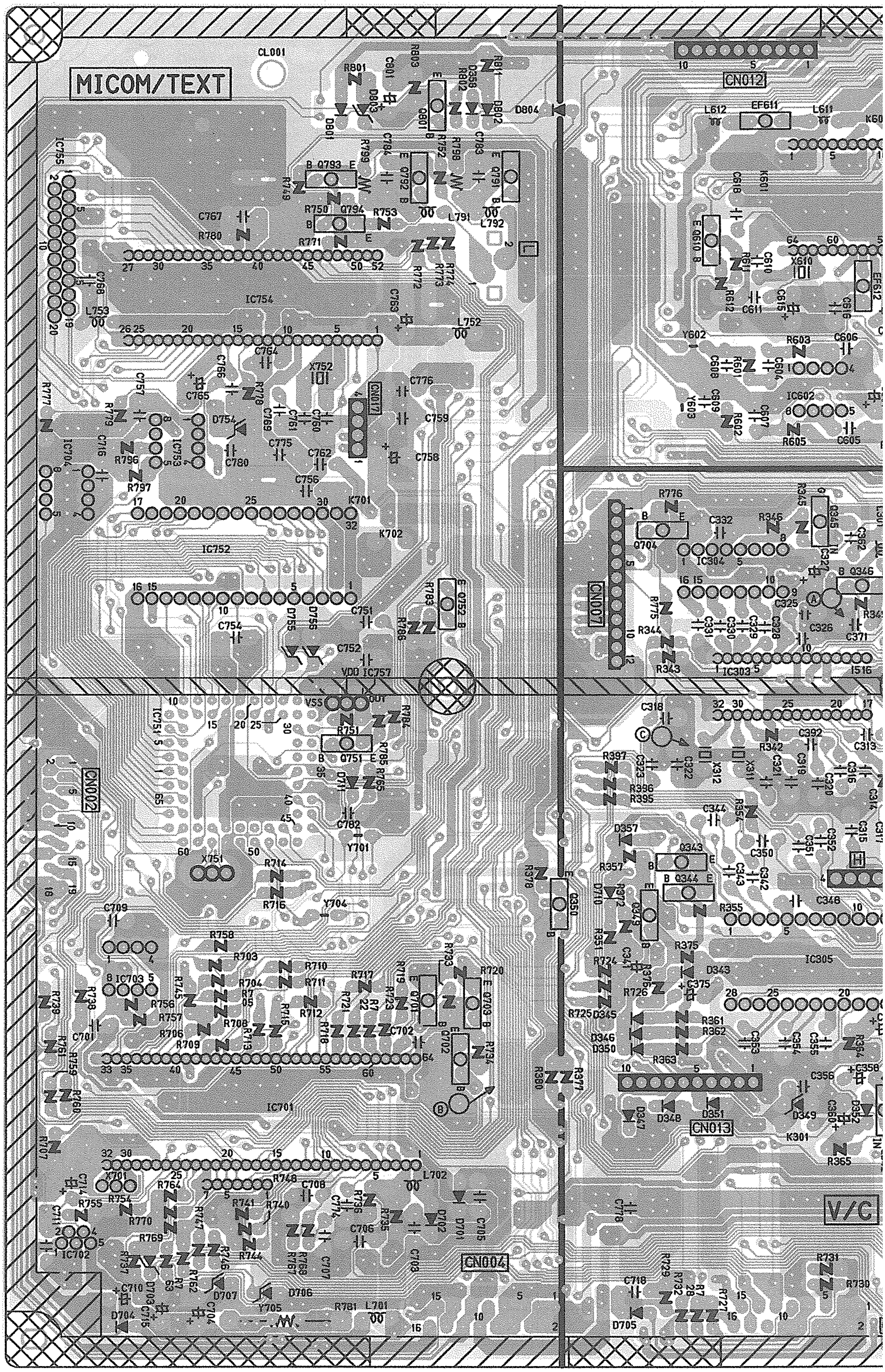

JVC
PWS
98.3.4
KOBAYASHI
CKM0190-B01-1
GCMK-301X
CN009
IC401
X401
L401
Q401
A
B
C
D
E

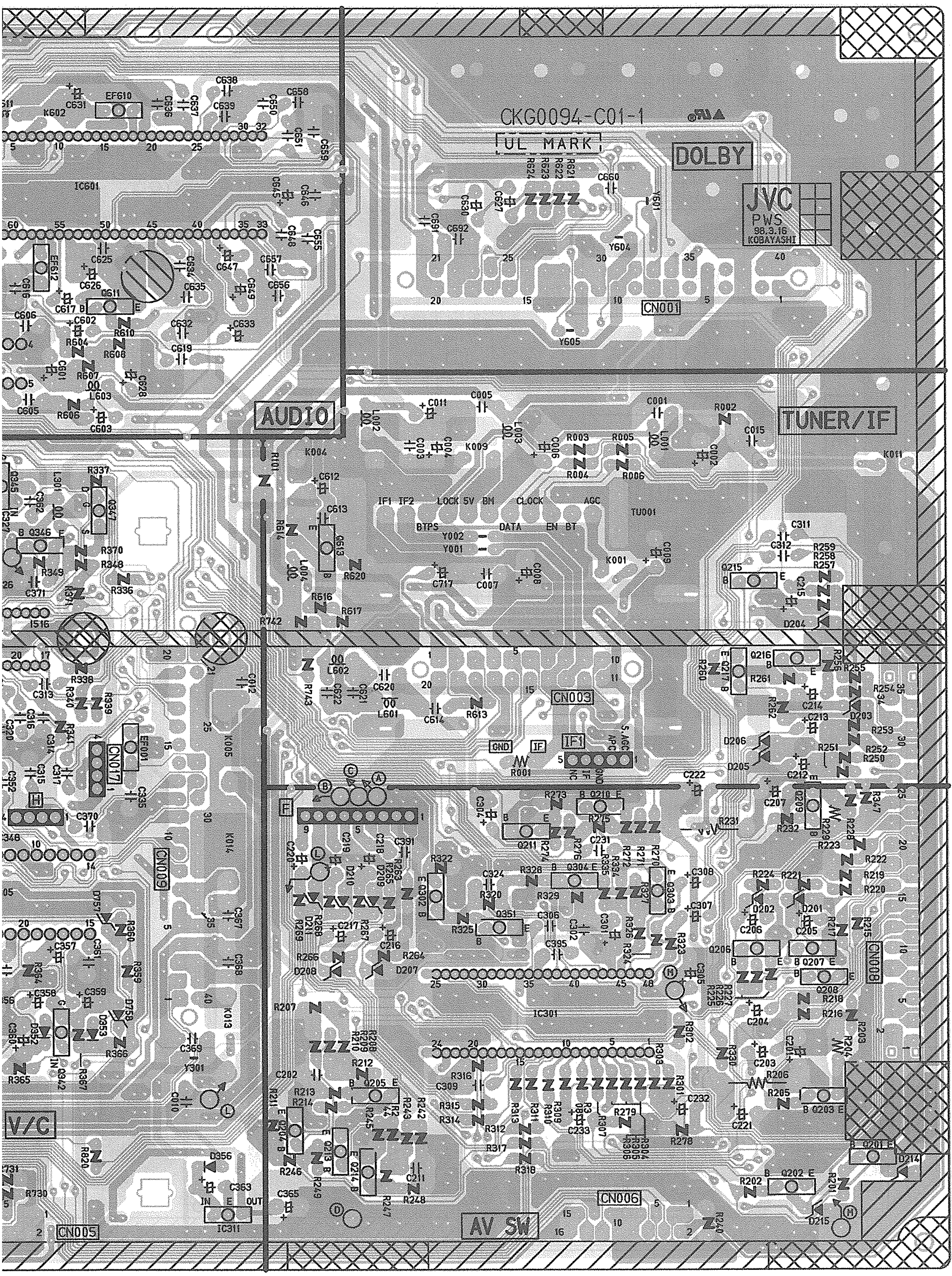
【 MAIN PWB PATTERN(PARTS SIDE) 】


FLOW
MAIN PB ASS'Y
SMC-1001A
SMC-1002A
SMC-1003A
SMC-1004A
DOLBY
CN001
TUNER/IF
AUDIO
TU001
AGC BT CLOCK BM 5V LOCK IF2 IF1
EN DATA BTPS
CN003
IF1
S.AGC APC GND NC
IF
GND
CN008
IC301
CN006
AV SW
IC311
OUT IN

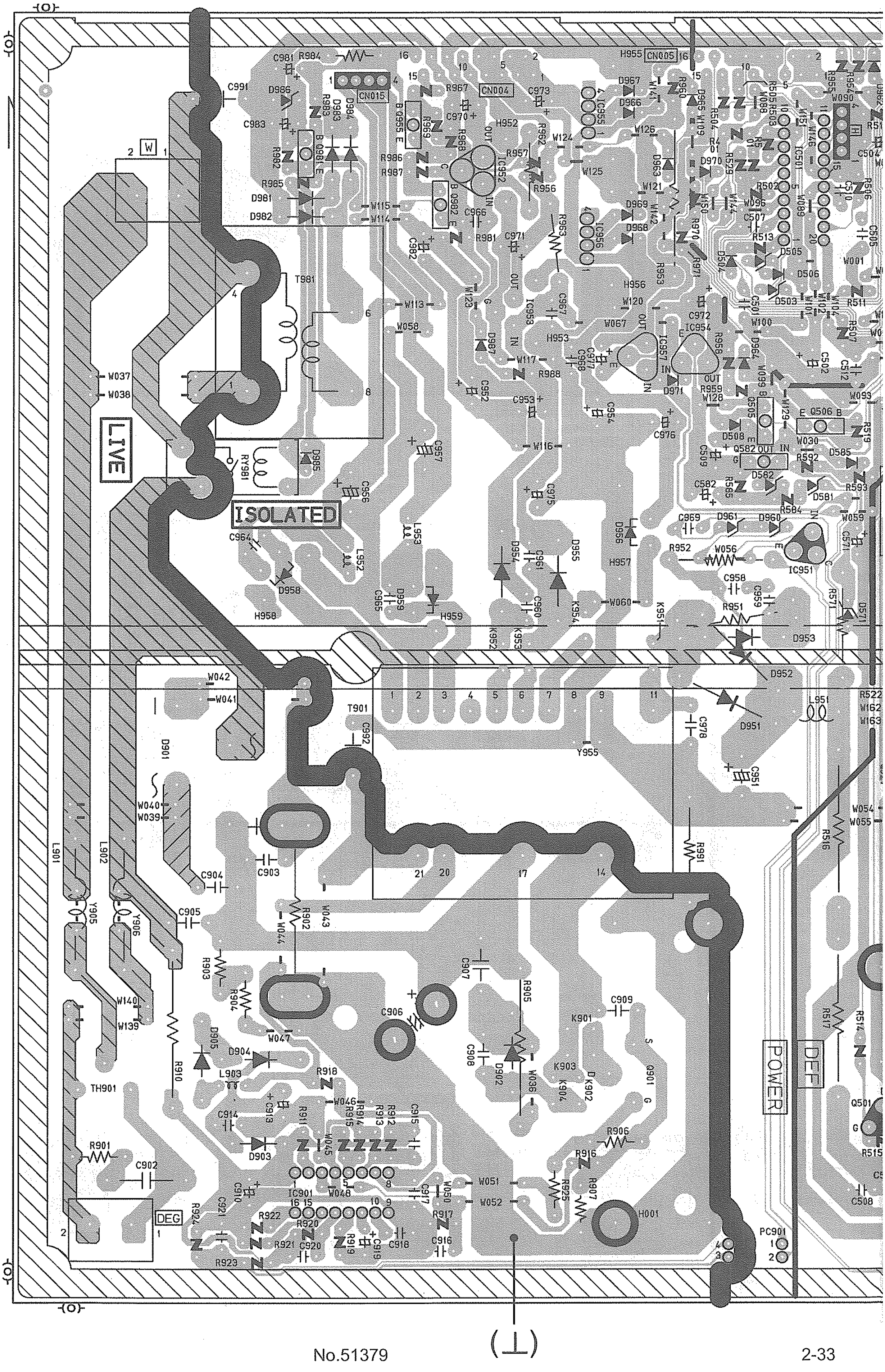

MICOM/TEXT
V/C
CN012
CN017
CN007
CN009
CN013
CN005
CN004
CN002
IC701
IC752
IC754
IC751

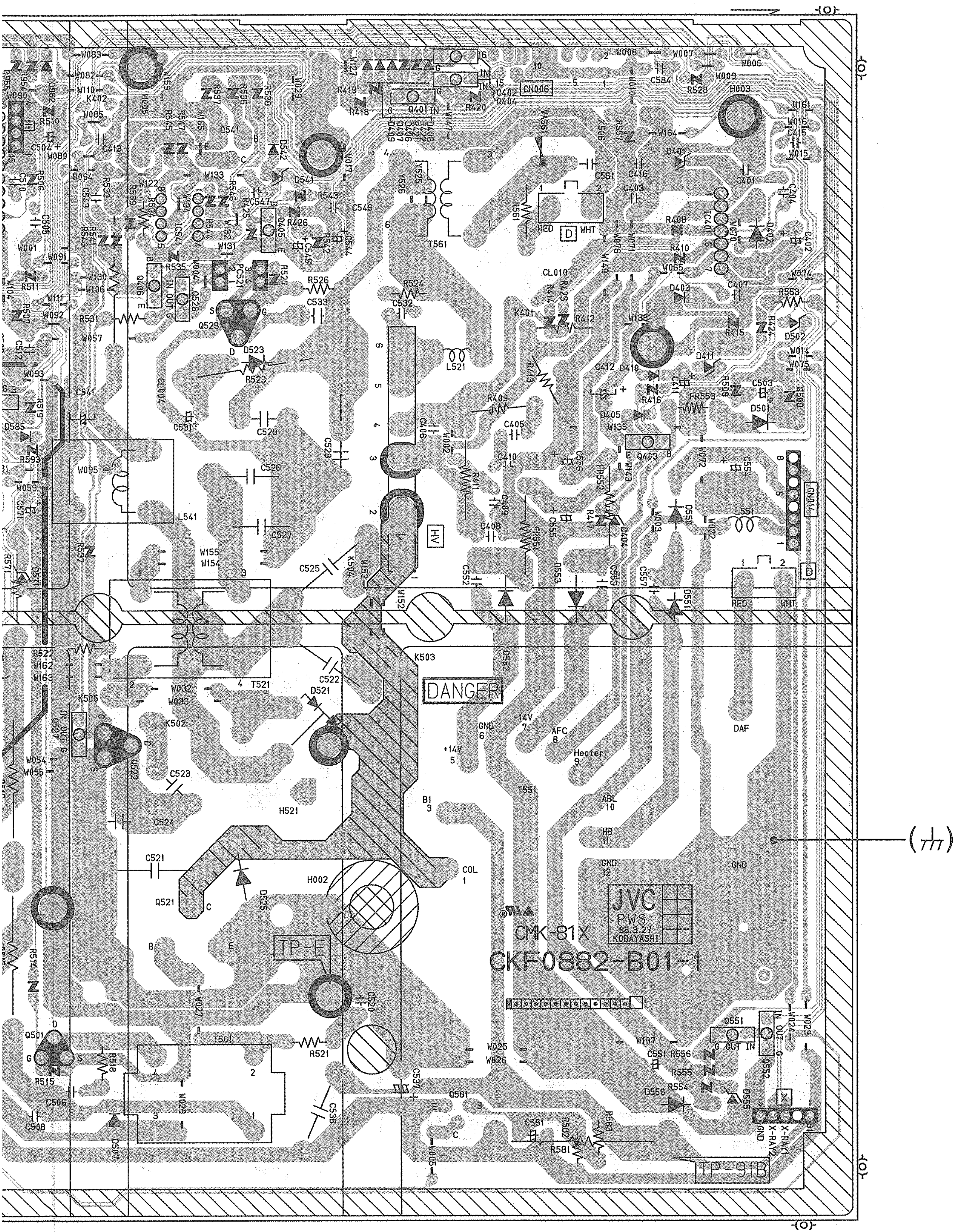
【 MAIN PWB PATTERN(SOLDER SIDE) 】


MICOM/TEXT
CL001
CN012
IC754
IC755
IC752
IC753
IC704
CN017
IC757
K701
K702
X752
D804
L612
EF611
L611
K601
Q610
X610
EF612
IC602
Y602
Y603
CN007
Q704
IC304
IC303
Q345
Q346
IC751
Q751
CN002
X751
Y701
Y704
Q350
Q343
Q344
IC305
IC703
IC701
Q701
Q702
Q703
X701
IC702
Y705
L701
CN004
CN013
K301
V/C
D705

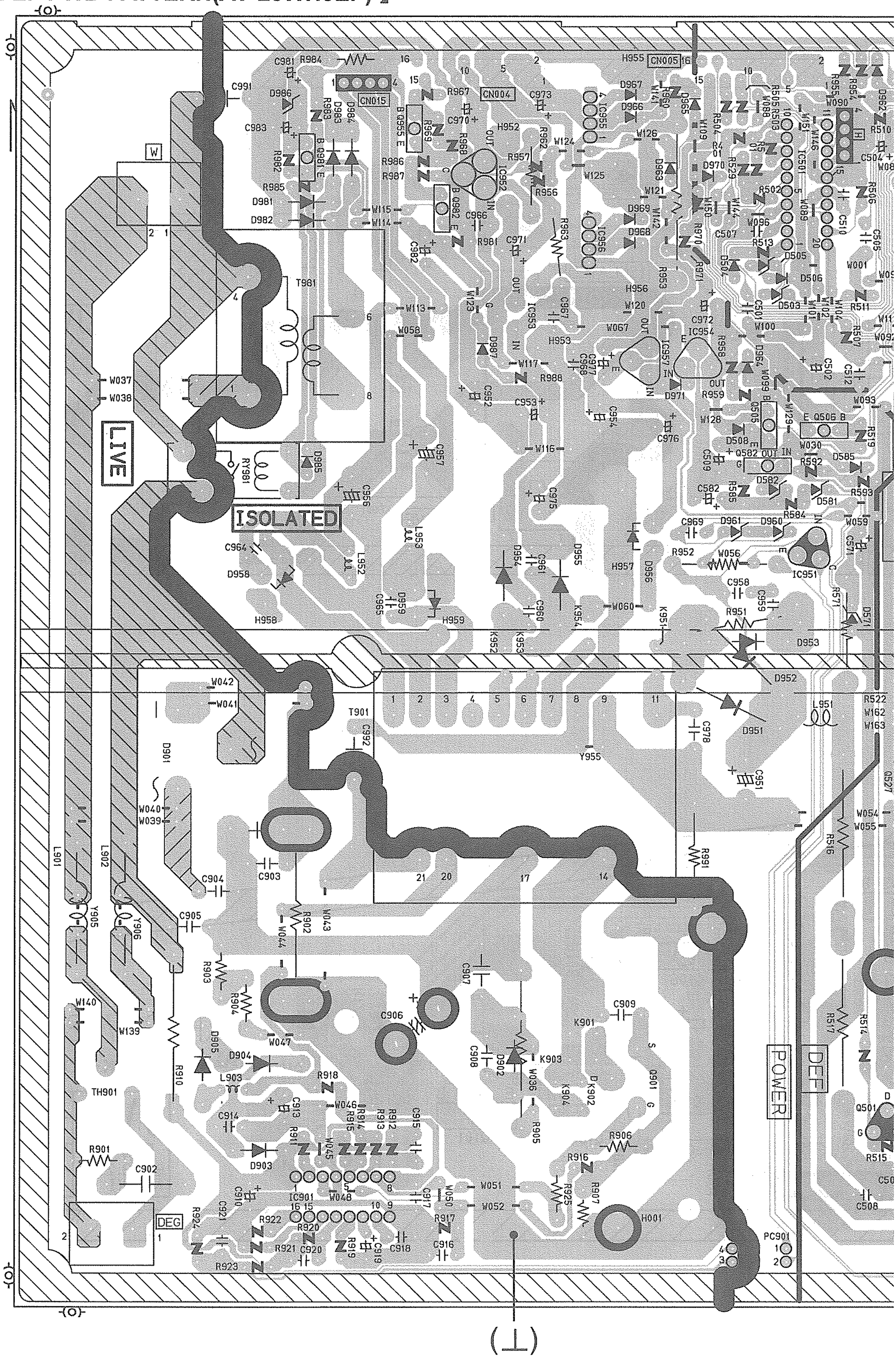

CKG0094-C01-1
UL MARK
DOLBY
JVC
PWS
98.3.16
KOBAYASHI
AUDIO
TUNER/IF
V/C
AV SW
CN001
CN003
CN005
CN006
CN008
CN009
CN017
TU001
IC301
IC311
IC601
IF1 IF2 LOCK 5V BM CLOCK AGC
BTPS DATA EN BT
GND
IF
IF1
S.AGC
APC
EF610
EF612
EF001
Q215
Q216
Q201
Q202
Q203
Q205
Q206
Q207
Q208
Q209
Q210
Q211
Q213
Q214
Q302
Q303
Q304
Q342
Q346
Q347
Q351
Q611
Q619
Y001
Y002
Y301
Y601
Y604
Y605
K001
K004
K005
K009
K011
K013
K014
K602

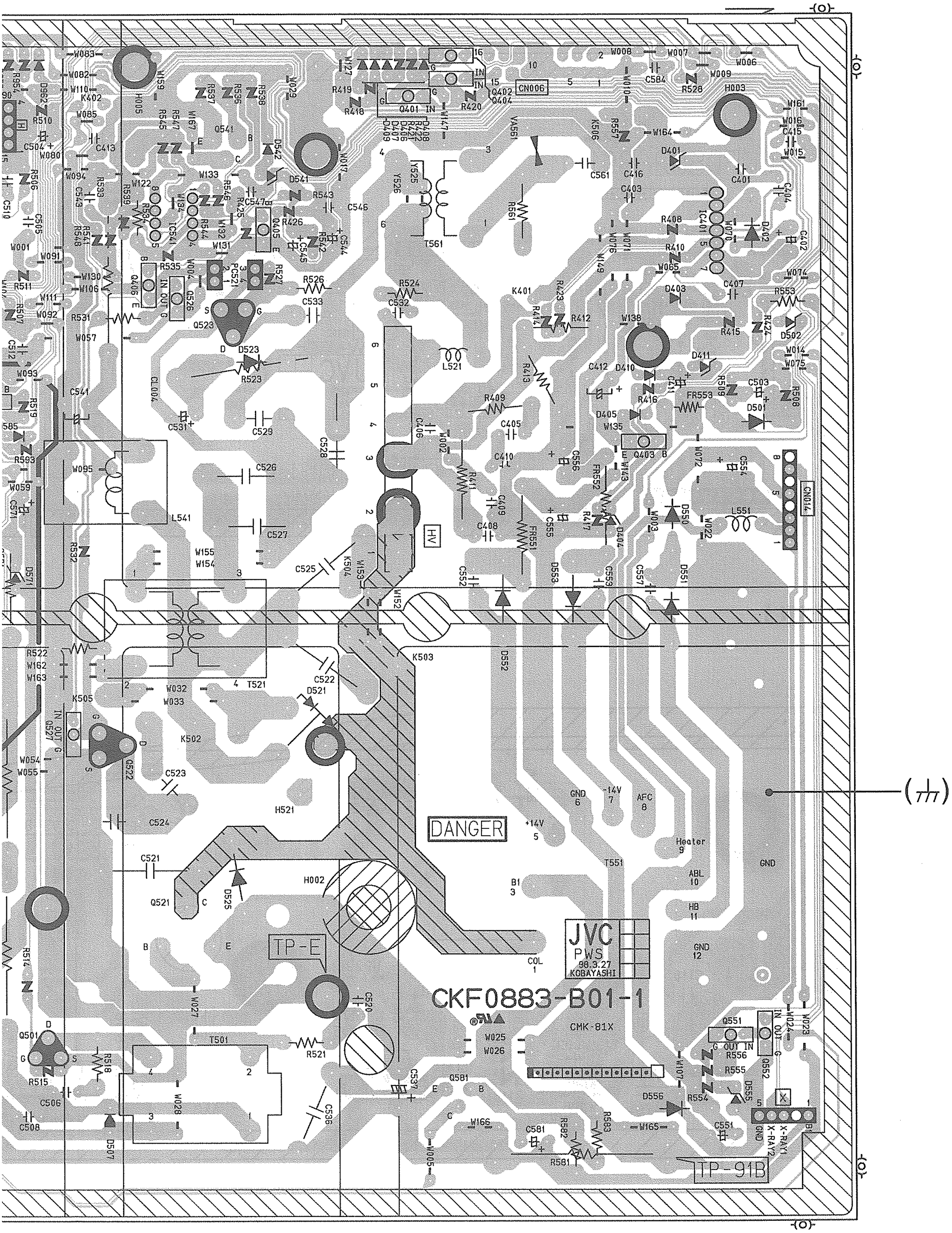
【 POWER DEF PWB PATTERN(AV-32WH3EP) 】


LIVE
ISOLATED
POWER
DEF
DEG
W
CN005
CN004
CN015
T981
T901
RY981
IC951
IC952
IC953
IC954
IC955
IC956
IC957
IC501
IC901
Q501
Q505
Q506
Q582
Q901
Q955
Q981
Q982
D901
D902
D903
D904
D905
D951
D952
D953
D954
D955
D956
D958
D959
D960
D961
D964
D965
D966
D967
D968
D969
D970
D971
D981
D982
D983
D984
D985
D986
D987
D503
D504
D505
D506
D508
D562
D571
D581
D585
L901
L902
L903
L951
L952
L953
TH901
Y905
Y906
Y955
H001
H952
H953
H955
H956
H957
H958
H959
K901
K902
K903
K904
K951
K952
K953
K954
PC901
R901
R902
R903
R904
R905
R906
R907
R910
R911
R912
R913
R914
R915
R916
R917
R918
R919
R920
R921
R922
R923
R924
R925
R951
R952
R953
R956
R957
R958
R959
R960
R962
R963
R967
R968
R969
R970
R971
R981
R982
R983
R984
R985
R986
R987
R988
R991
R502
R506
R507
R511
R513
R514
R515
R516
R517
R519
R522
R529
R564
R565
R571
R592
R593
C902
C903
C904
C905
C906
C907
C908
C909
C910
C913
C914
C915
C916
C917
C918
C919
C920
C921
C951
C952
C953
C954
C956
C957
C958
C959
C960
C961
C964
C965
C966
C967
C968
C969
C970
C971
C972
C973
C975
C976
C977
C978
C981
C982
C983
C991
C992
C501
C502
C504
C505
C507
C508
C509
C510
C512
C571
C582
W037
W038
W039
W040
W041
W042
W043
W044
W045
W046
W047
W048
W050
W051
W052
W054
W055
W056
W058
W059
W060
W067
W093
W096
W100
W113
W114
W115
W116
W117
W120
W121
W124
W125
W126
W128
W129
W139
W140
W162
W163
OUT
IN
E
B
C
G
S
1
2
3
4
5
6
7
8
9
10
11
14
15
16
17
20
21
(⊥)

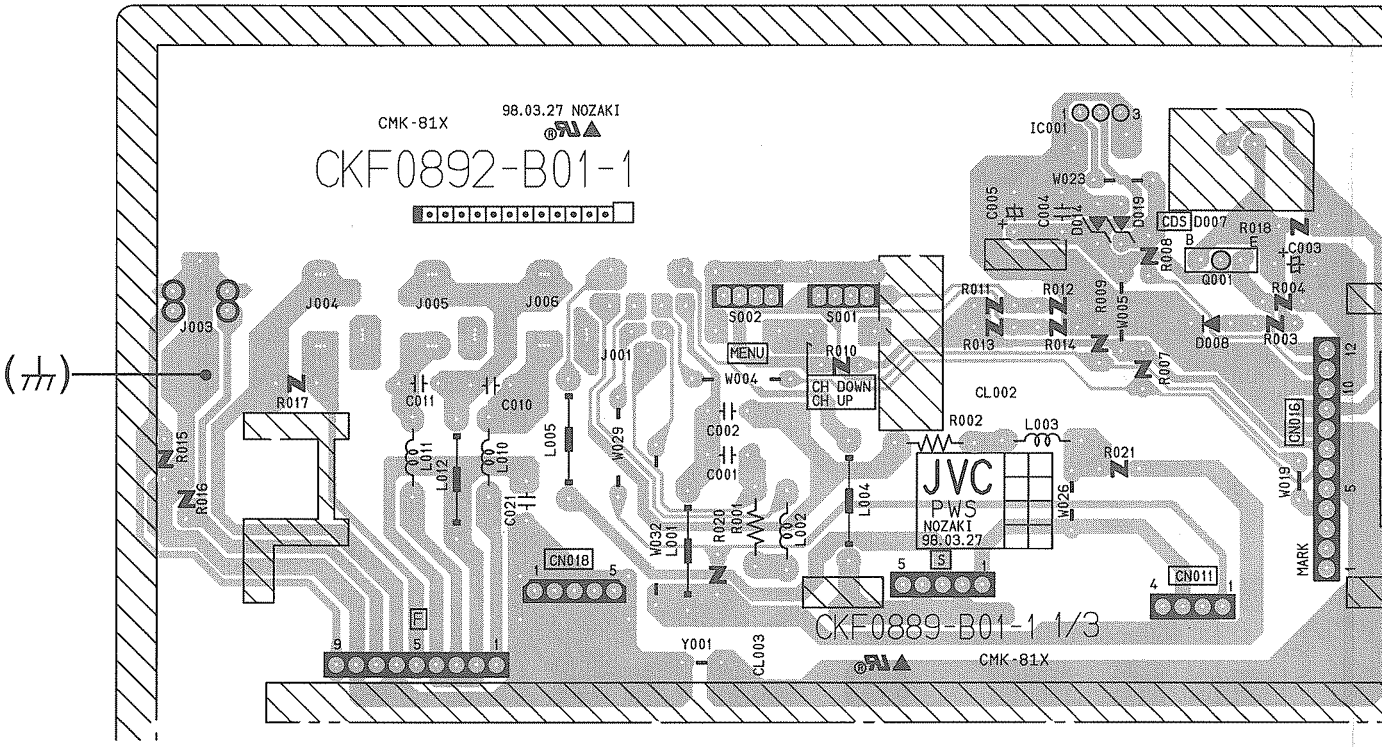

DANGER
HV
TP-E
TP-91B
CMK-81X
CKF0882-B01-1
JVC
PWS
98.3.27
KOBAYASHI
COL 1
B1 3
+14V 5
GND 6
-14V 7
AFC 8
Heater 9
ABL 10
HB 11
GND 12
DAF
GND
T551
T521
T501
T561
H002
H003
H005
H521
IC401
IC541
CN006
CN014
Q401
Q402
Q403
Q404
Q405
Q406
Q501
Q521
Q522
Q523
Q526
Q527
Q541
Q551
Q552
Q581
PC521
L521
L541
L551
K401
K402
K502
K503
K504
K505
K506
D401
D402
D403
D404
D405
D410
D411
D501
D502
D521
D523
D525
D541
D542
D550
D551
D552
D553
D555
D556
D571
D585
D587
D962
RED
WHT
D
X-RAY1
X-RAY2
GND
IN OUT G
G OUT IN
(⏚)

【 POWER DEF PWB PATTERN(AV-28WH3EP) 】

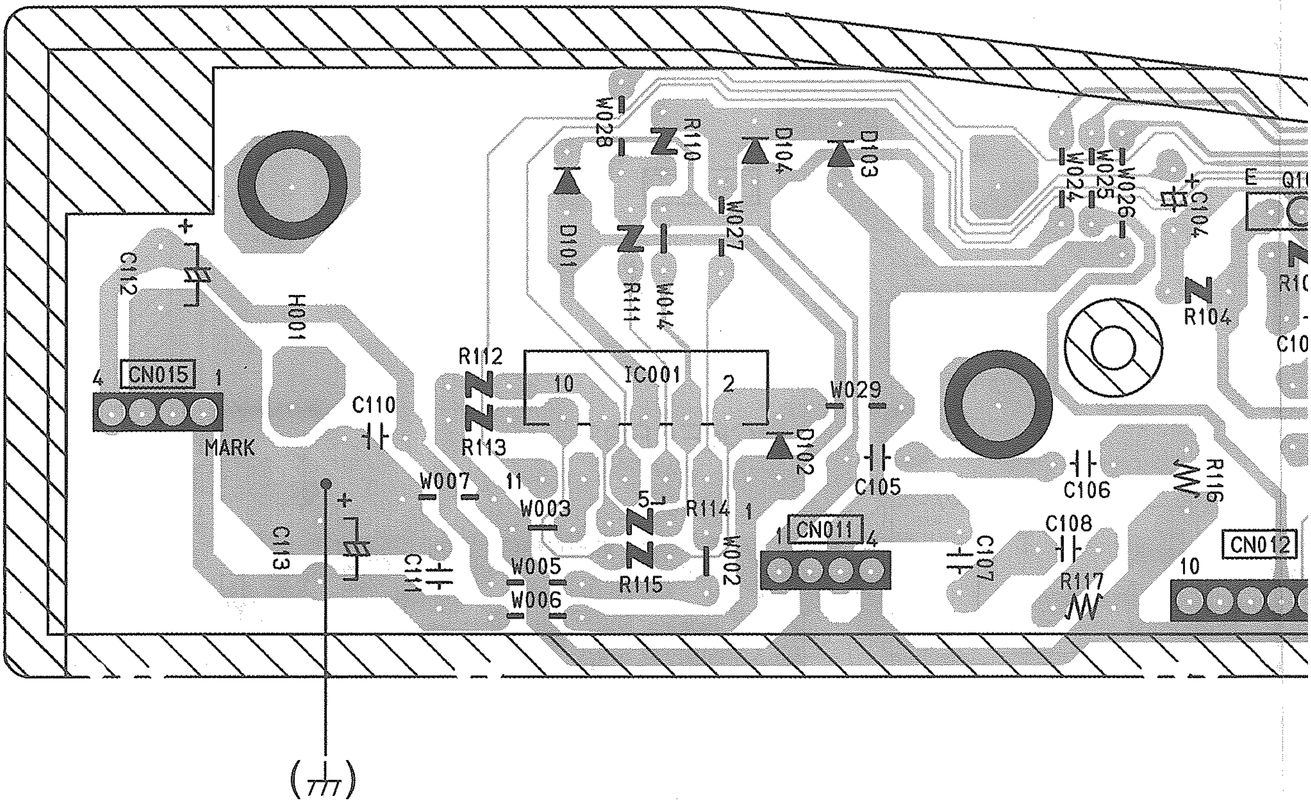

LIVE
ISOLATED
POWER
DEF
DEG
W
T981
T901
IC901
IC951
IC952
IC953
IC954
IC955
IC956
IC957
IC501
Q901
Q501
PC901
TH901
L901
L902
L951
CN004
CN005
CN015
(⊥)

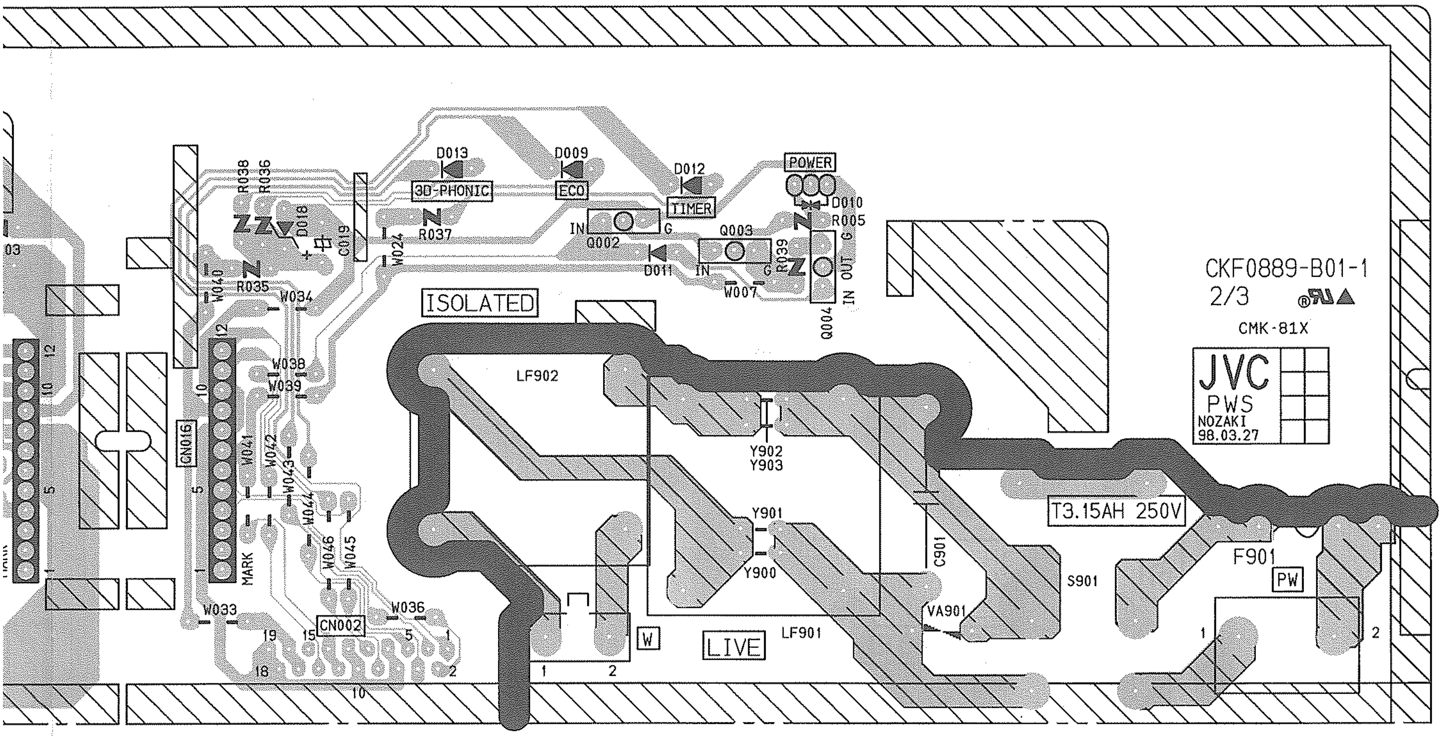

CKF0883-B01-1
JVC
PWS
98.3.27
KOBAYASHI
CMK-81X
DANGER
TP-E
TP-91B
HV
T551
T521
T501
T561
L541
L551
L521
CN006
CN014
IC401
H002
H003
H005
H521
GND
+14V
-14V
AFC
Heater
ABL
HB
COL
B1
X-RAY1
X-RAY2
Q401
Q402
Q403
Q404
Q405
Q406
Q501
Q521
Q522
Q523
Q526
Q527
Q541
Q551
Q552
Q581
PC521

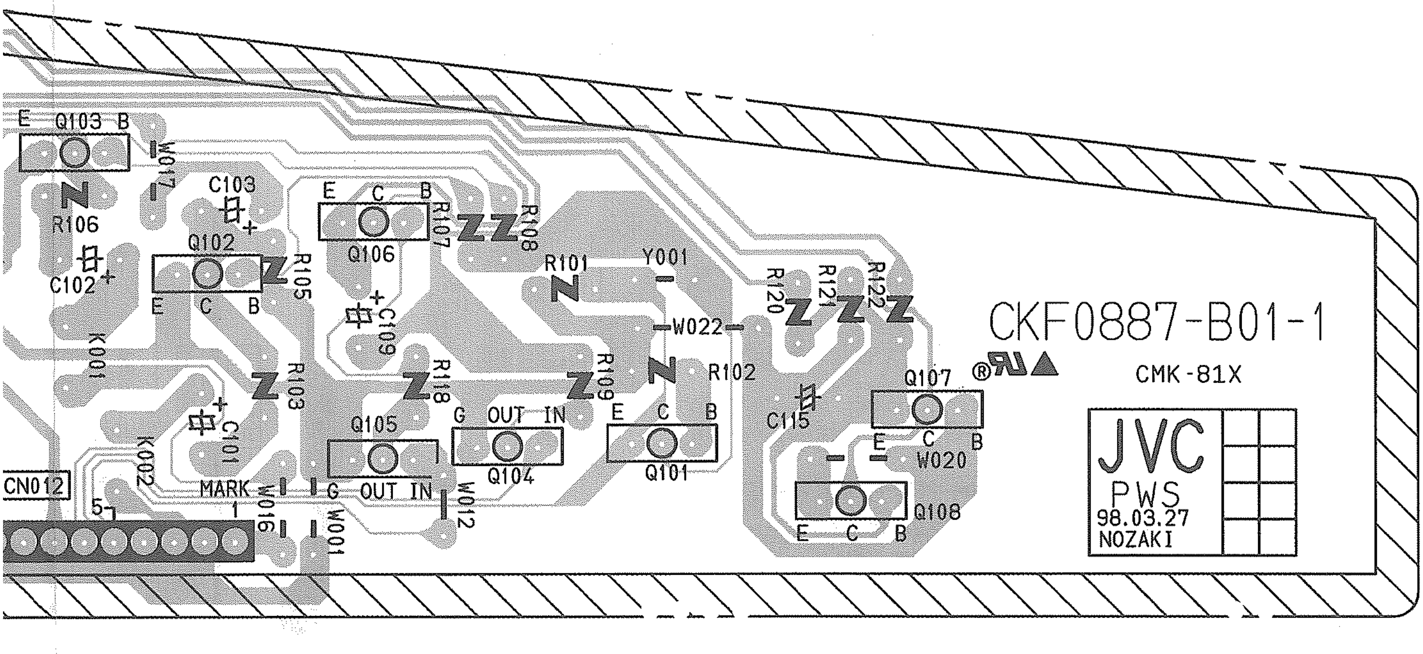
【 FRONT CTL PWB PATTERN 】


CMK-81X
98.03.27 NOZAKI
CKF0892-B01-1
IC001
W023
C005
C004
D014
D019
CDS
D007
R018
C003
R008
B
E
Q001
R004
R011
R012
R009
W005
D008
R003
R013
R014
R007
J003
J004
J005
J006
S002
S001
MENU
R010
CH DOWN
CH UP
J001
W004
CL002
R017
C011
C010
C002
C001
R002
L003
R021
CN016
W019
R015
R016
L011
L012
L010
L005
W029
C021
R020
R001
L002
L001
W032
L004
JVC
PWS
NOZAKI
98.03.27
W026
CN018
CN011
MARK
F
9
5
1
Y001
CL003
CKF0889-B01-1 1/3
CMK-81X

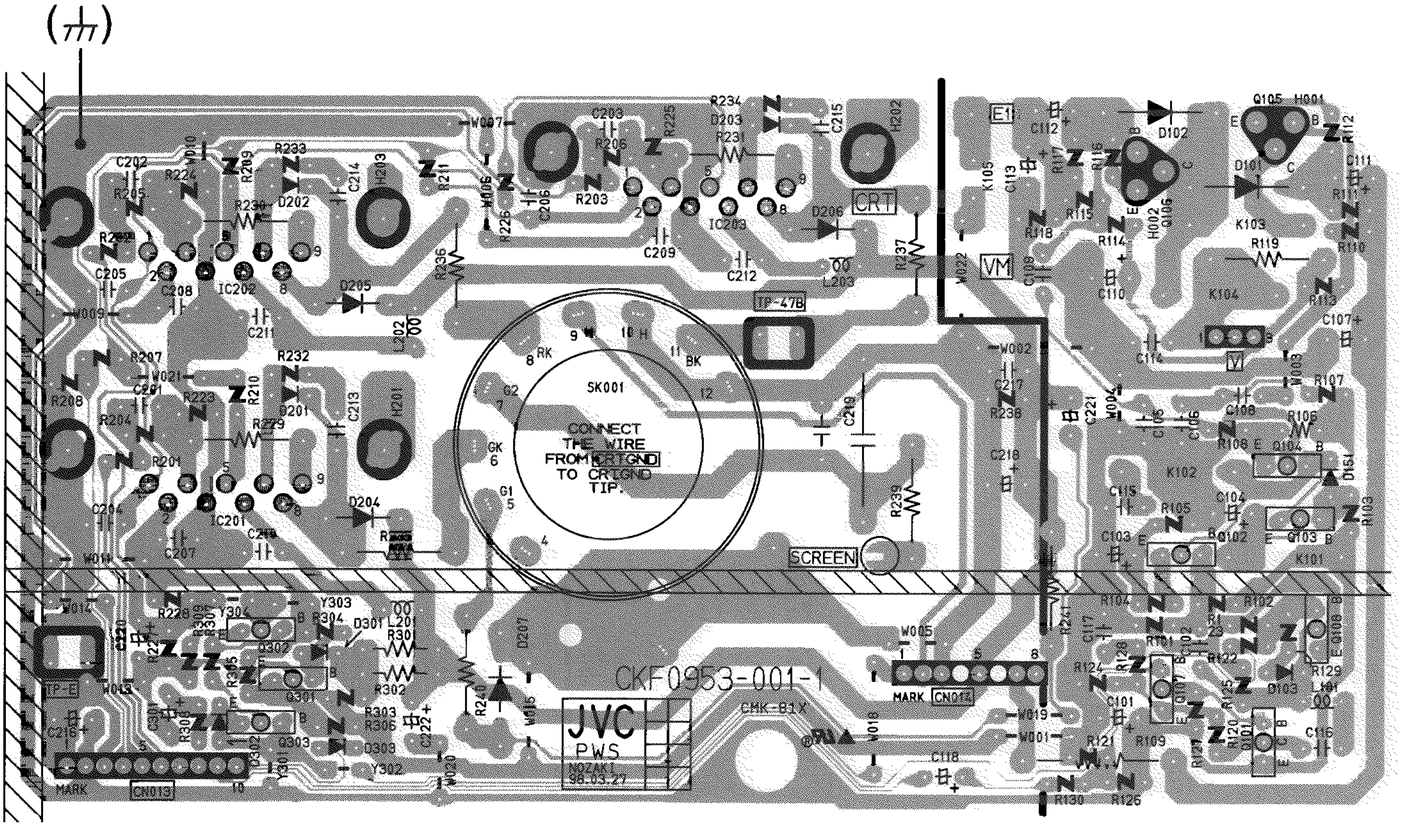
【 AUDIO PWB PATTERN 】


W028
R110
D104
D103
W024
W025
W026
C104
E
D101
W027
C112
H001
R111
W014
R104
CN015
MARK
R112
R113
IC001
10
2
11
5
W029
C110
D102
W007
W003
C105
C106
R116
C113
C111
W005
W006
R114
R115
W002
CN011
C107
C108
R117
CN012

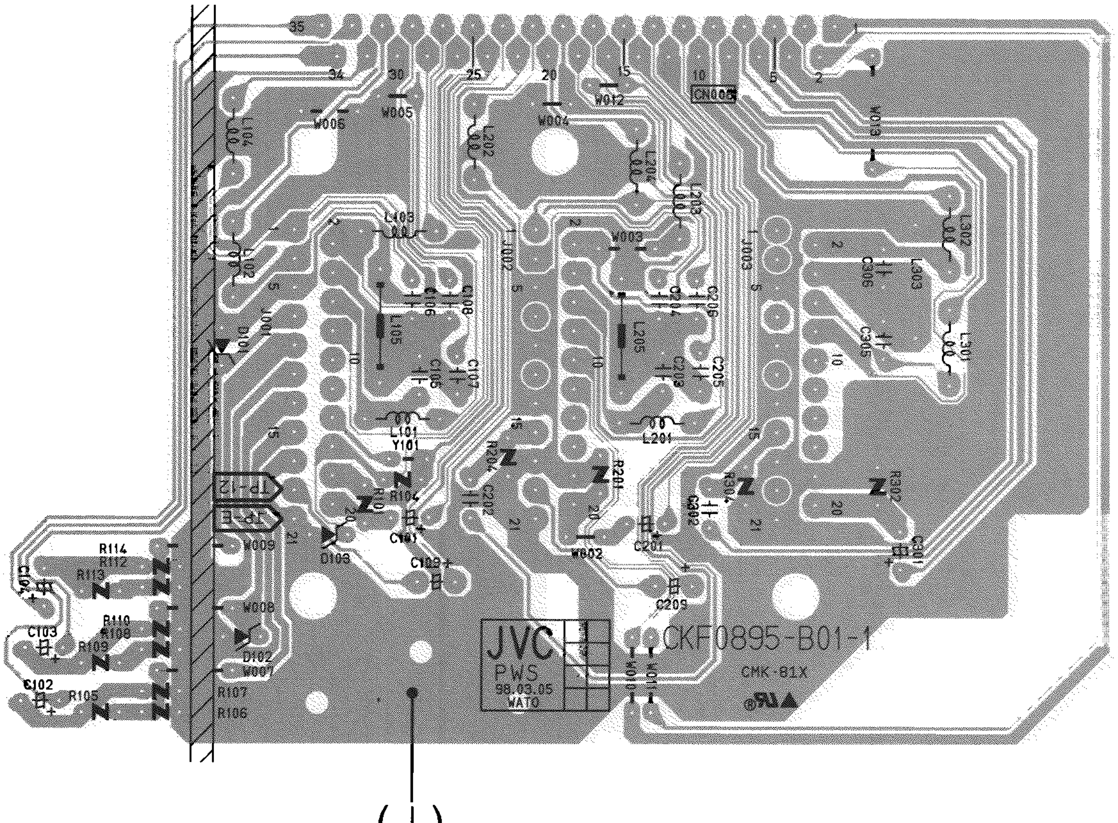

D013
D009
D012
POWER
3D-PHONIC
ECO
TIMER
D010
R005
R038
R036
D018
C019
W024
R037
IN
Q002
G
Q003
D011
IN
G
R039
OUT
W007
Q004
W040
R035
W034
ISOLATED
CKF0889-B01-1
2/3
CMK-81X
JVC
PWS
NOZAKI
98.03.27
LF902
W038
W039
CN016
W041
W042
W043
W044
W046
W045
MARK
Y902
Y903
Y901
Y900
C901
S901
T3.15AH 250V
F901
PW
W033
CN002
W036
19
15
5
1
18
10
2
W
LIVE
LF901
VA901
1
2
12
10
5
1
03


E
Q103
B
W017
C103
R106
Q102
C102
E
C
B
R105
E
C
B
Q106
R107
R108
R101
Y001
R120
R121
R122
C109
W022
K001
R103
R118
R109
R102
C115
Q107
CKF0887-B01-1
CMK-81X
JVC
PWS
98.03.27
NOZAKI
C101
Q105
G
OUT
IN
E
C
B
E
C
B
W020
K002
Q104
Q101
CN012
MARK
W016
G
OUT
IN
W012
W001
5
1
Q108
E
C
B

【 CRT SOCKET PWB PATTERN 】


SK001
CONNECT THE WIRE FROM CRTGND TO CRTGND TIP.
RK
GK
BK
G1
G2
H
SCREEN
CRT
VM
TP-47B
TP-E
CN013
CN014
MARK
IC201
IC202
IC203
CKF0953-001-1
CMK-81X
JVC PWS
NOZAKI 98.03.27

【 AV TER. PWB PATTERN 】


CN006
J001
J002
J003
TP-12
TP-11
CKF0895-B01-1
CMK-81X
JVC PWS
98.03.05 WATO

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

CONTENTS

- USING P.W. BOARD & REMOTE CONTROL UNIT ···· 32
- DIFFERENCE OF PARTS LIST ···· 33
- EXPLODED VIEW PARTS LIST ···· 34
- EXPLODED VIEW ···· 34

■ PRINTED WIRING BOARD PARTS LIST

- MAIN PW BOARD ASS'Y (SMC-1003A-U2)[AV-32WH3EP] ···· 36
- MAIN PW BOARD ASS'Y (SMC-1004A-U2) [AV-28WH3EP] ···· 39
- IF PW BOARD ASS'Y (SMC0F701A-U2) ···· 41
- AUTO ASPECT MODULE (SMC-W001A(U)) ···· 42
- POWER DEF PW BOARD ASS'Y (SMC-2002A-U2) [AV-32WH3EP] ···· 43
- POWER DEF PW BOARD ASS'Y (SMC-2003A-U2) [AV-28WH3EP ···· 45
- CRT SOCKET PW BOARD ASS'Y (SMC-3002A-U2) [AV-32WH3EP] ···· 47
- CRT SOCKET PW BOARD ASS'Y (SMC-3003A-U2) [AV-28WH3EP] ···· 47
- AUDIO PW BOARD ASS'Y (SMC-6002A-U2) ···· 48
- AV TERMINAL PW BOARD ASS'Y (SMC0J001A-U2) ···· 48
- FRONT CONTROL PW BOARD ASS'Y (SMC-8002A-U2) ···· 49
- 100Hz PW BOARD ASS'Y (SMC0Z001A-U2) ···· 49

- REMOTE CONTROL UNIT PARTS LIST ···· 51
- PACKING ···· 52
- PACKING PARTS LIST ···· 52

USING P.W. BOARD & REMOTE CONTROL UNIT

Model P.W.B ASS'Y	AV-32WH3EP	AV-28WH3EP
MAIN P.W.B	SMC-1003A-U2	SMC-1004A-U2
POWER DEF PWB	SMC-2002A-U2	SMC-2003A-U2
CRT SOCKET P.W.B	SMC-3002A-U2	SMC-3003A-U2
AUDIO P.W.B	SMC-6002A-U2	←
FRONT CONTROL P.W.B	SMC-8002A-U2	←
AV TERMINAL P.W.B	SMC0J001A-U2	←
100Hz P.W.B	SMC0Z001A-U2	←
IF P.W.B	SMC0F701A-U2	←
AUTO ASPECT MODULE	SMC-W001A(U)	←
REMOTE CONTROL UNIT	RM-C795-1E	←

DIFFERENCE OF PARTS LIST

EXPLODED VIEW PARTS LIST

⚠	Ref. No	Part Name	Part No		Description
			AV-32WH3EP	AV-28WH3EP	
⚠	L01	DEGAUSSING COIL	CELD062-001J2	CELD061-001J2	
⚠	V01	ITC TUBE(C)	W76ESF031X44	W66ESF002X44	
⚠	T2551	H.V.TRANSF.	CETH021-00AJ1	CETH020-00AJ1	SERVICE
	L03	ROTATION COIL	CELD904-001	-------------------	(32"ONLY)
⚠	1	REAR COVER	CM12737-003-E	CM12582-A04-E	
	6	FFC WIRE	CHFB119-10BD	CHFB119-06BD	
	8	BRAIDED ASSY	CHGB0029-0C	CHGB0029-0B	
⚠	12	RATING LABEL	LC20092-004A-U	LC20092-005A-U	
⚠	13	RATING LABEL	LC20093-004A-U	LC20093-005A-U	
	14	CONTROL BASE	CM12925-B01-E	CM12925-B03-E	
	17	DOME SPACER	CM22951-001	-------------------	X2 (32"ONLY)
	19	TRANSF.HOLDER	CM23076-B01-E	-------------------	(32"ONLY)
	21	RECEP WIRE ASSY	CHGT0055-0E	QUB190-34ASFX	
	23	TAPPING SCREW	GBSA4016N	-------------------	X3 (32"ONLY)
	26	CONTER PANEL	CM12925-A02-E	CM12925-A04-E	
	100	FRONT CABINET ASSY	CM12587-A0R-E	CM12833-A0F-E	Include No.101~113
	105	DOOR	CM23131-004-E	CM23132-004-E	SERVICE
	106	SPEAKER NET	CM36172-00A-S	CM36171-00A-H	X2

PACKING PARTS LIST

⚠	Ref. No	Part Name	Part No		Description
			AV-32WH3EP	AV-28WH3EP	
	1	PACKING CASE	AEM1002-A43-E	AEM1002-A44-E	
	2	CUSHION ASSY	CP11549-B0B-E	CP11547-A0B-E	
	3	SET COVER	AEM1004-A07-E	AEM1004-A06-E	
	4	CUSHION SHEET	AEM3022-003-E	CP40193-009-E	
	12	X-RAY CARD	LC10102-003A-U	LC10102-004A-U	
	15	EURO LABEL	AEM1038-089-E	AEM1038-090-E	

EXPLODED VIEW PARTS LIST

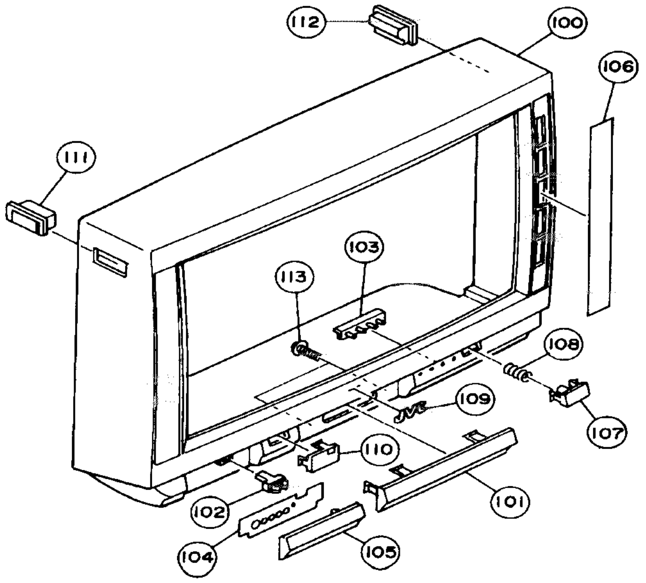
AV-32WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	L01	CELD062-001J2	DEGAUSSING COIL		*
⚠	V01	W76ESF031X44	ITC TUBE(C)		*
⚠	T2551	CETH021-00AJ1	H.V.TRANSF	(SERVICE)	*
	L03	CELD904-001	ROTATION COIL	(32" ONLY)	*
⚠	1	CM12737-003-E	REAR COVER		*
	2	GBSA4016N	TAPPING SCREW	x13	*
	3	CM12923-A01-E	CHASSIS BASE		*
	4	CM12924-005-E	AV TERMINAL BASE		*
	5	SBSB3012M	TAPPING SCREW	x3	*
	6	CHFB119-10BD	FFC WIRE		*
	7	CEBSF10P-03KJ6	SPEAKER	x2 (SP01/SP02)	*
	8	CHGB0029-0C	BRAIDED ASSY		*
	9	CHGB0017-0B	BRAIDED SUB ASSY	x2	*
⚠	10	AEEMP001-185	POWER CORD		*
⚠	11	CM46618-A01-E	POWER CORD CLAMP		*
⚠	12	LC20092-004A-U	RATING LABEL		*
⚠	13	LC20093-004A-U	RATING LABEL		*
	14	CM12925-B01-E	CONTROL BASE		*
	15	GBSA4016N	TAPPING SCREW	x12	*
	16	WJM0014-001A	S.P WIRE ASS'Y	x2	*
	17	CM22951-001	DOME SPACER	x2(32" ONLY)	
	18	2528MXSP-2SE	DOME SPK BOX	x2	*
	19	CM23076-B01-E	TRANSF.HOLDER	(32" ONLY)	*
	20	CHGY0017-0A-YS	ANTENNA CABLE		*
	21	CHGT0055-0E	RECEP WIRE ASSY		*
	22	QQR0491-001	FILTER	x2	
	23	GBSA4016N	TAPPING SCREW	x3(32" ONLY)	*
	24	CE42112-002	PALJ CONNECTOR		
	25	CM36311-001	KNOB CAP		
	26	CM12925-A02-E	CONTROL BASE		*
	100	CM12587-A0R-E	FRONT CABINET AS	Include NO.101~113	*
	101	CM12966-A01-E	CENTER PANEL		*
	102	CM48229-00A	DOOR LATCH		
	103	CM36223-001	L.E.D.LENS		*
	104	CM36587-003-E	OPERATION SHEET		
	105	CM23131-004-E	DOOR	(SERVICE)	*
	106	CM36172-00A-S	SPEAKER NET	x2	*
	107	CM36225-010-E	POWER KNOB	(SERVICE)	*
	108	CM35235-003-H	SPRING		*
	109	CM48125-001	JVC MARK		
	110	CM48076-A01	CDS WINDOW		*
	111	CM35865-00U	INSULATER ASSY	(SERVICE)	*
	112	CM35865-00V	INSULATOR ASSY	(SERVICE)	*
	113	GBSB4012Z	TAPPING SCREW	x2	*

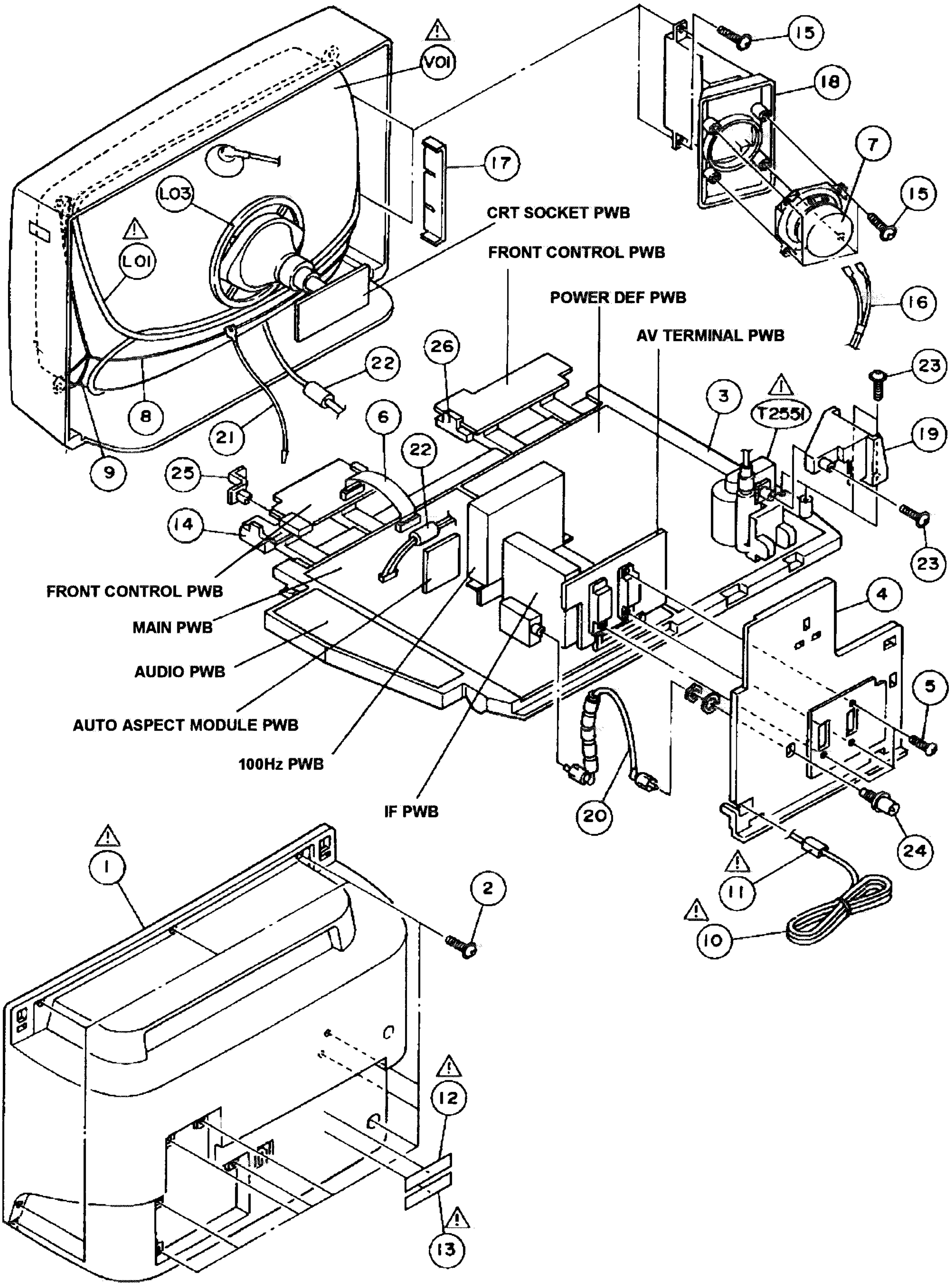
AV-28WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	L01	CELD061-001J2	DEGAUSSING COIL		*
⚠	V01	W66ESF002X44	ITC TUBE(C)		*
⚠	T2551	CETH020-00AJ1	HVT(SERVICE)		*
⚠	1	CM12582-A04-E	REAR COVER		*
	2	GBSA4016N	TAPPING SCREW	x13	*
	3	CM12923-A01-E	CHASSIS BASE		*
	4	CM12924-005-E	AV TERMINAL BASE		*
	5	SBSB3012M	TAPPING SCREW	x3	*
	6	CHFB119-06BD	FFC WIRE		*
	7	CEBSF10P-03KJ6	SPEAKER	x2 (SP01/SP02)	*
	8	CHGB0029-0B	BRAIDED ASSY		*
	9	CHGB0017-0B	BRAIDED SUB ASSY	x2	*
⚠	10	AEEMP001-185	POWER CORD		*
⚠	11	CM46618-A01-E	POWER CORD CLAMP		*
⚠	12	LC20092-005A-U	RATING LABEL		*
⚠	13	LC20093-005A-U	RATING LABEL		*
	14	CM12925-B03-E	CONTROL BASE		*
	15	GBSA4016N	TAPPING SCREW	x12	*
	16	WJM0014-001A	S.P WIRE ASS'Y	x2	*
	18	2528MXSP-2SE	DOME SPK BOX	x2	*
	20	CHGY0017-0A-YS	ANTENNA CABLE		*
	21	QUB190-34ASFX	RECEP WIRE ASSY		*
	22	QQR0491-001	FILTER	x2	
	24	CE42112-002	PALJ CONNECTOR		
	25	CM36311-001	KNOB CAP		
	26	CM12925-A04-E	CONTROL BASE		*
	100	CM12833-A0F-E	F.CABINET ASSY	Include NO.101~113	*
	101	CM12966-A01-E	CENTER PANEL		*
	102	CM48229-00A	DOOR LATCH		
	103	CM36223-001	L.E.D.LENS		*
	104	CM36587-003-E	OPERATION SHEET		
	105	CM23132-004-E	DOOR	(SERVICE)	*
	106	CM36171-00A-H	SPEAKER NET	x2	*
	107	CM36225-010-E	POWER KNOB	(SERVICE)	*
	108	CM35235-003-H	SPRING		*
	109	CM48125-001	JVC MARK		
	110	CM48076-A01	CDS WINDOW		*
	111	CM35865-00U	INSULATER ASSY	(SERVICE)	*
	112	CM35865-00V	INSULATOR ASSY	(SERVICE)	*
	113	GBSB4012Z	TAPPING SCREW	x2	

EXPLODED VIEW



EXPLODED VIEW


V01
17
CRT SOCKET PWB
FRONT CONTROL PWB
POWER DEF PWB
AV TERMINAL PWB
L03
L01
8
9
21
22
26
6
22
25
14
FRONT CONTROL PWB
MAIN PWB
AUDIO PWB
AUTO ASPECT MODULE PWB
100Hz PWB
IF PWB
15
18
7
15
16
23
3
T2551
19
23
4
5
20
24
11
10
1
2
12
13

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SMC-1003A-U2)

AV-32WH3EP

RESISTOR

Δ	Symbol No.	Part No.	Part Name	Description	Local
	R1001	QRK126J-474X	C R	470kΩ 1/2W J	*
	R1002	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1003-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1201-02	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1203	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1204	QRK126J-151X	C R	150Ω 1/2W J	
	R1205	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1206	QRG01GJ-101	OM R	100Ω 1W J	*
	R1207	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1208	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1209	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1210	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1211	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1212	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1213	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1214	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1215	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1216	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1217	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1218	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1219	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1221	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1222	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1224	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1225-26	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1227	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1228	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1229	QRK126J-181X	C R	180Ω 1/2W J	*
	R1231	QRG01GJ-101	OM R	100Ω 1W J	*
	R1232	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1240	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1242	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1243	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1244	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1245	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1246	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1247	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1248	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1249	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1250	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1251	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1252	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1253	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1254	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1256	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1257	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1259	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1260-61	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1262	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1263	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1264	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1265	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1266	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1267-69	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1270	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1271-72	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1273	QRE141J-121Y	C R	120Ω 1/4W J	*
	R1274	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1275	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1278-79	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1301	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1302	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1303	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1304	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1305	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1306	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1307	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1308	QRE141J-471Y	C R	470Ω 1/4W J	*

RESISTOR

Δ	Symbol No.	Part No.	Part Name	Description	Local
	R1309	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1310	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1311	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1312	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1313	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1314-15	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1317-18	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1320	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1322	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R1323-24	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1325	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1326-29	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1330	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1334-35	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1338-40	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1341	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1342	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1343-44	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1345-46	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1347	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1348	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1349	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R1351	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1354-55	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1359-63	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1364	QRE141J-105Y	C R	1MΩ 1/4W J	*
	R1365	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1366-67	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R1370	QRE141J-820Y	C R	82Ω 1/4W J	*
	R1371	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1372	QRE141J-274Y	C R	270kΩ 1/4W J	*
	R1375	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1376	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1377	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1378	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1601-02	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1603	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1604	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1605	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1606	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1607-08	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1610	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1611	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1612	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1613	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1614	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1616	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1617	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1620	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1703-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1707	QRE141J-331Y	C R	330Ω 1/4W J	*
	R1708-09	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1710	QRE141J-821Y	C R	820Ω 1/4W J	*
	R1711-13	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1714	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1715-18	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1719	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1720-23	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1724-26	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1727	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1728	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1729	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1730	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1731	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1732-34	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1735-36	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R1738	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R1739	QRE141J-331Y	C R	330Ω 1/4W J	*

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R1740-41	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1742	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1743	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1744-45	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1746-47	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1748	QRB069J-103	NETW.R		*
	R1749-50	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R1751	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1752-53	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1754-55	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1756-57	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1758-59	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1760	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1761-63	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1765	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1767	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1768	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1769-70	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1771	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R1772-74	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1775-76	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R1777	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1779	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1780	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1781	QRL039J-270	OM R	27Ω 3W J	*
	R1783-86	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1796-97	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1798-99	QRK126J-820X	C R	82Ω 1/2W J	
	R1801	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1803	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1820	QRE141J-332Y	C R	3.3kΩ 1/4W J	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1001	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1002	QETC1HM-107Z	E CAP.	100µF 50V M	*
	C1003	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1004	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C1005	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1006	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C1007	QCB31HK-222Z	C CAP.	2200pF 50V K	*
	C1008	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1009	QEHC1CM-227Z	E CAP.	220µF 16V M	*
	C1010	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C1011	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1012	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1015	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1201	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C1202	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1203-04	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1205-06	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1207	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C1211	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1212-13	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1214-15	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1216-17	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1218-19	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1220	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1221-22	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C1231	QFLC1HJ-103Z	M CAP.	0.01µF 50V J	*
	C1232-33	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1301	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C1302	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1304	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1305	QETN1HM-226Z	E CAP.	22µF 50V M	*
	C1306	QFLC1HJ-223Z	M CAP.	0.022µF 50V J	*
	C1307-08	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1309	QCS31HJ-390Z	C CAP.	39pF 50V J	*
	C1311-13	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1314	QCB31HK-222Z	C CAP.	2200pF 50V K	*
	C1315	QFV71HJ-474Z	MF CAP.	0.47µF 50V J	*
	C1316	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1317	QFV71HJ-154Z	MF CAP.	0.15µF 50V J	*
	C1318	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1319	QCB31HK-332Z	C CAP.	3300pF 50V K	*
	C1320	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1321	QDC31HJ-120Z	C CAP.	12pF 50V J	*
	C1322	QDC31HJ-120Z	C CAP.	12pF 50V J	*
	C1323	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1324	QCS31HJ-391Z	C CAP.	390pF 50V J	*
	C1325-26	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1327	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C1328-32	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1341	QEN61HM-105Z	BP E CAP.	1µF 50V M	*
	C1342-44	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1348	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1350-52	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1353-55	QFV71HJ-224Z	MF CAP.	0.22µF 50V J	*
	C1356	QCS31HJ-271Z	C CAP.	270pF 50V J	*
	C1357	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1358	QETN1HM-475Z	E CAP.	4.7µF 50V M	*
	C1359	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1360	QETN1HM-335Z	E CAP.	3.3µF 50V M	*
	C1361	QCB31HK-152Z	C CAP.	1500pF 50V K	*
	C1362	QDC31HJ-270Z	C CAP.	27pF 50V J	*
	C1363	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C1365	QEZ0256-228	E CAP.		
	C1371	QCS31HJ-680Z	C CAP.	68pF 50V J	*
	C1375	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C1392	QCS31HJ-680Z	C CAP.	68pF 50V J	*
	C1395	QCS31HJ-120Z	C CAP.	12pF 50V J	*
	C1601	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C1602-03	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1604-05	QCB31HK-103Z	C CAP.	0.01µF 50V K	*
	C1606-07	QCB31HK-152Z	C CAP.	1500pF 50V K	*
	C1608-09	QCB31HK-103Z	C CAP.	0.01µF 50V K	*
	C1610-11	QDC31HJ-2R0Z	C CAP.	2.0pF 50V J	*
	C1612	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1613	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C1614	QCS31HJ-820Z	C CAP.	82pF 50V J	*
	C1615	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1616	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1617	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C1618-19	QCB31HK-103Z	C CAP.	0.01µF 50V K	*
	C1620-21	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C1622	QCS31HJ-180Z	C CAP.	18pF 50V J	*
	C1625	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1626	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1627	QENC1HM-105Z	BP E CAP.	1µF 50V M	*
	C1628	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1630	QENC1HM-105Z	BP E CAP.	1µF 50V M	*
	C1631	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1632	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1633	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1634-35	QCB31HK-471Z	C CAP.	470pF 50V K	*
	C1636	QCB31HK-103Z	C CAP.	0.01µF 50V K	*
	C1637	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	C1638-39	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1645	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1646	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1647	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1648	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1649	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C1650-51	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1655-57	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1658	QCB31HK-391Z	C CAP.	390pF 50V K	*
	C1659	QCB31HK-391Z	C CAP.	390pF 50V K	*
	C1701	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C1702	QCB31HK-682Z	C CAP.	6800pF 50V K	*
	C1703	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1704	QETN1AM-107Z	E CAP.	100µF 10V M	*
	C1705-06	QDC31HJ-3R0Z	C CAP.	3.0pF 50V J	*
	C1707	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1708	QFLC1HJ-333Z	M CAP.	0.033µF 50V J	*
	C1709	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1710	QETN1EM-476Z	E CAP.	47µF 25V M	*

CAPACITOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1711	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1714	QETN1HM-474Z	E CAP.	0.47µF 50V M	*
C1715	QETN1CM-476Z	E CAP.	47µF 16V M	*
C1716	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1717	QETN1HM-105Z	E CAP.	1µF 50V M	*
C1718	QCB31HK-471Z	C CAP.	470pF 50V K	*
C1751	QFLC1HJ-563Z	M CAP.	0.056µF 50V J	*
C1752	QFV71HJ-224Z	MF CAP.	0.22µF 50V J	*
C1754	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1756-57	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1758	QETN1AM-227Z	E CAP.	220µF 10V M	*
C1759	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1760-61	QDC31HJ-150Z	C CAP.	15pF 50V J	*
C1762	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1763	QETN1CM-476Z	E CAP.	47µF 16V M	*
C1764	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1766-68	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1769	QCS31HJ-471Z	C CAP.	470pF 50V J	*
C1774	QCB31HK-151Z	C CAP.	150pF 50V K	*
C1775	QCS31HJ-121Z	C CAP.	120pF 50V J	*
C1776	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1780	QFLC1HJ-104Z	M CAP.	0.1µF 50V J	*
C1782	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
C1783-84	QCS31HJ-680Z	C CAP.	68pF 50V J	*
C1801	QETN1CM-107Z	E CAP.	100µF 16V M	*

COIL

⚠ Symbol No.	Part No.	Part Name	Description	Local
L1001-02	QQL01BK-8R2Z	COIL	8.2µH K	*
L1003	QQL01BK-221Z	COIL	220µH K	*
L1004	QQL01BK-101Z	COIL	100µH K	*
L1301	QQL01BK-390Z	COIL	39µH K	*
L1601	QQL01BJ-220Z	COIL	22µH J	*
L1602	QQL01BJ-180Z	COIL	18µH J	*
L1603	QQL01BK-100Z	COIL	10µH K	*
L1611-12	CELC005-2R5J7	CHOKE COIL	2.5µH	*
L1701	QQL01BK-4R7Z	COIL	4.7µH K	*
L1702	QQL01BK-8R2Z	COIL	8.2µH K	*
L1752	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
L1753	QQL01BK-4R7Z	COIL	4.7µH K	*
L1791-92	CE41433-001Z	BEADS CORE		*

DIODE

⚠ Symbol No.	Part No.	Part Name	Description	Local
D1201-11	MTZJ13B-T2	ZENER DIODE		*
D1214-15	MTZJ13B-T2	ZENER DIODE		*
D1343	1SS133-T2	SI.DIODE		*
D1345-48	1SS133-T2	SI.DIODE		*
D1349	MTZJ6.2B-T2	ZENER DIODE		*
D1350-53	1SS133-T2	SI.DIODE		*
D1356	1SS146-T2	SI.DIODE		*
D1357-58	1SS133-T2	SI.DIODE		*
D1701-02	1SS133-T2	SI.DIODE		*
D1704	1SS146-T2	SI.DIODE		*
D1705	1SS133-T2	SI.DIODE		*
D1710-11	1SS133-T2	SI.DIODE		*
D1754-58	MTZJ6.2B-T2	ZENER DIODE		*
D1801-02	1SS133-T2	SI.DIODE		*
D1804	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q1201-05	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
Q1208	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1209-10	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1211	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1213-14	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
Q1217	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1302	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1303-04	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1342	DTC144ESA-T	DIGI.TRANSISTOR		*
Q1343-44	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
Q1346	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1347	2SK301/P/-T	F.E.T.		*

TRANSISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q1349-51	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1610	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
Q1613	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1701-04	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1751-52	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1791-94	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1801	2PA1015/YG/-T	SI.TRANSISTOR		*

IC

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC1301	CXA1545AS	I.C.(MONO-ANA)		*
IC1303	TDA9143/N2/S1	I C		
IC1304	TDA4665	I.C.(MONO-ANA)		*
IC1305	TDA4780	I.C.(MONO-ANA)		*
IC1311	AN77L05-T	I.C.(MONO-ANA)		*
IC1601	MSP3410D-PP-B4	I C		*
IC1602	BA4558	I.C.(MONO-ANA)		*
IC1701	M37207MF-150SP	I C		
IC1702	L78LR05E-MA	I.C.(MONO-ANA)		*
IC1703	AT24C16-WH3	I.C(EP-ROM)		*
IC1704	AT24C16-10PC	I.C.(EP-ROM)		*
IC1751	SDA30C263	MICRO COMPUTER		
IC1752	M27C1001-WH3	I.C(EP-ROM)		*
IC1753	AT24C16-10PC	I.C.(EP-ROM)		*
IC1754	SDA5273-2S	MEGA TEXT		
IC1755	MSM514400D-60Z	D RAM		
IC1757	MN1280/Q/	I.C.(DIGI-MOS)		*

OTHERS

⚠ Symbol No.	Part No.	Part Name	Description	Local
	QQR0490-001	NOISE FILTER		
	CEMS009-064	I.C.SOCKET		
	CEMS006-068	IC SOCKET		
	CEMS007-032	IC SOCKET		
EF1001	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
EF1610-12	CE42142-103Z	EMI FILTER		*
K1001	CE41433-001Z	BEADS CORE		*
K1004	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1005	CE41492-001Z	CHOKE COIL		*
K1009	CE41433-001Z	BEADS CORE		*
K1011	CE41433-001Z	BEADS CORE		*
K1013-14	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1301	CE41433-001Z	BEADS CORE		*
K1601	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1602	CE41433-001Z	BEADS CORE		*
K1701-02	CE41433-001Z	BEADS CORE		*
MD03	------------	IF PWB ASSY	SMC0F701A-U2	
MD07	------------	AUTO ASPECT MODU	SMC-W001A(U)	
TU1001	CEEK481-A02	TUNER		
X1311	CE40749-001Z	CRYSTAL		*
X1312	CE40668-001Z	CRYSTAL		*
X1610	CE42546-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER.RESONATOR		*
X1751	QAX0307-001	CER.RESONATOR		
X1752	QAX0351-001Z	X TAL		*

MAIN P.W. BOARD ASS'Y (SMC-1004A-U2)

AV-28WH3EP

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R1001	QRK126J-474X	C R	470kΩ 1/2W J	*
	R1002	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1003-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1201-02	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1203	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1204	QRK126J-151X	C R	150Ω 1/2W J	
	R1205	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1206	QRG01GJ-101	OM R	100Ω 1W J	*
	R1207	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1208	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1209	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1210	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1211	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1212	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1213	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1214	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1215	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1216	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1217	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1218	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1219	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1221	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1222	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1224	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1225-26	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1227	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1228	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1229	QRK126J-181X	C R	180Ω 1/2W J	*
	R1231	QRG01GJ-101	OM R	100Ω 1W J	*
	R1232	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1240	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1242	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1243	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1244	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1245	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1246	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1247	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1248	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1249	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1250	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1251	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1252	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1253	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1254	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1256	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1257	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1259	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1260-61	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1262	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1263	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1264	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1265	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1266	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1267-69	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1270	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1271-72	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1273	QRE141J-121Y	C R	120Ω 1/4W J	*
	R1274	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1275	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1278-79	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1301	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1302	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1303	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1304	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1305	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1306	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1307	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1308	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1309	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1310	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1311	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1312	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1313	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1314-15	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1317-18	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1320	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1322	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R1323-24	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1325	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1326-29	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1330	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1334-35	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1338-40	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1341	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1342	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1343-44	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1345-46	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1347	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1348	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1349	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R1351	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1354-55	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1359-63	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1364	QRE141J-105Y	C R	1MΩ 1/4W J	*
	R1365	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1366-67	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R1370	QRE141J-820Y	C R	82Ω 1/4W J	*
	R1371	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1372	QRE141J-274Y	C R	270kΩ 1/4W J	*
	R1375	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1376	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1377	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1378	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1601-02	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1603	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1604	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1605	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1606	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1607-08	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1610	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1611	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1612	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1613	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1614	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1616	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1617	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1620	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1703-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1707	QRE141J-331Y	C R	330Ω 1/4W J	*
	R1708-09	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1710	QRE141J-821Y	C R	820Ω 1/4W J	*
	R1711-13	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1714	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1715-18	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1719	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1720-23	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1724-26	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1727	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1728	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1729	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1730	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1731	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1732-34	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1735-36	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R1738	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R1739	QRE141J-331Y	C R	330Ω 1/4W J	*
	R1740-41	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1742	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1743	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1744-45	QRE141J-103Y	C R	10kΩ 1/4W J	*

⚠	Symbol No.	Part No.	Part Name	Description	Local

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R1746-47	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1748	QRB069J-103	NETW.R.		*
	R1751	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1754-55	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1756-57	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1758-59	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1760	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1761-63	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1765	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1767	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1768	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1769-70	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1771	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R1772-74	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1775-76	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R1777	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1779	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1780	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1781	QRL039J-270	OM R	27Ω 3W J	*
	R1783-86	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1796-97	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1801	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1803	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1820	QRE141J-332Y	C R	3.3kΩ 1/4W J	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1001	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1002	QETC1HM-107Z	E CAP.	100μF 50V M	*
	C1003	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1004	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C1005	QCZ0120-104Z	C CAP	0.1μF 25V Z	*
	C1006	QETN1CM-227Z	E CAP.	220μF 16V M	*
	C1007	QCB31HK-222Z	C CAP	2200pF 50V K	*
	C1008	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1009	QEHC1CM-227Z	E CAP.	220μF 16V M	*
	C1010	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C1011	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1012	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1015	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1201	QETN1CM-227Z	E CAP	220μF 16V M	*
	C1202	QCB31HK-102Z	C CAP	1000pF 50V K	*
	C1203-04	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1205-06	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1207	QETN1CM-227Z	E CAP.	220μF 16V M	*
	C1211	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1212-13	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1214-15	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1216-17	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1218-19	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1220	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1221-22	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C1231	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
	C1232-33	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1301	QETN1CM-227Z	E CAP.	220μF 16V M	*
	C1302	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1304	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1305	QETN1HM-226Z	E CAP.	22μF 50V M	*
	C1306	QFLC1HJ-223Z	M CAP.	0.022μF 50V J	*
	C1307-08	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1309	QCS31HJ-390Z	C CAP.	39pF 50V J	*
	C1311-13	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1314	QCB31HK-222Z	C CAP.	2200pF 50V K	*
	C1315	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
	C1316	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1317	QFV71HJ-154Z	MF CAP.	0.15μF 50V J	*
	C1318	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1319	QCB31HK-332Z	C CAP.	3300pF 50V K	*
	C1320	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1321	QDC31HJ-120Z	C CAP.	12pF 50V J	*
	C1322	QDC31HJ-120Z	C CAP.	12pF 50V J	*
	C1323	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1324	QCS31HJ-391Z	C CAP.	390pF 50V J	*
	C1325-26	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1327	QETN1CM-227Z	E CAP.	220μF 16V M	*

⚠	Symbol No.	Part No.	Part Name	Description	Local

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1328-32	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1341	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
	C1342-44	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1348	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1350-52	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1353-55	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
	C1356	QCS31HJ-271Z	C CAP.	270pF 50V J	*
	C1357	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1358	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
	C1359	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1360	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C1361	QCB31HK-152Z	C CAP.	1500pF 50V K	*
	C1362	QDC31HJ-270Z	C CAP.	27pF 50V J	*
	C1363	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C1365	QEZ0256-228	E CAP.		
	C1371	QCS31HJ-680Z	C CAP.	68pF 50V J	*
	C1375	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C1392	QCS31HJ-680Z	C CAP.	68pF 50V J	*
	C1395	QCS31HJ-120Z	C CAP.	12pF 50V J	*
	C1601	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C1602-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1604-05	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
	C1606-07	QCB31HK-152Z	C CAP.	1500pF 50V K	*
	C1608-09	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
	C1610-11	QDC31HJ-2R0Z	C CAP.	2.0pF 50V J	*
	C1612	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1613	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C1614	QCS31HJ-820Z	C CAP.	82pF 50V J	*
	C1615	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1616	QCZ0120-104Z	C CAP	0.1μF 25V Z	*
	C1617	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1618-19	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
	C1620-21	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C1622	QCS31HJ-180Z	C CAP.	18pF 50V J	*
	C1625	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1626	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1627	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
	C1628	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1630	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
	C1631	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1632	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1633	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1634-35	QCB31HK-471Z	C CAP.	470pF 50V K	*
	C1636	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
	C1637	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	C1638-39	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1645	QETN1HM-106Z	E CAP	10μF 50V M	*
	C1646	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1647	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1648	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1649	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C1650-51	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1655-57	QCB31HK-102Z	C CAP.	1000pF 50V K	*
	C1658	QCB31HK-391Z	C CAP.	390pF 50V K	*
	C1659	QCB31HK-391Z	C CAP.	390pF 50V K	*
	C1701	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C1702	QCB31HK-682Z	C CAP.	6800pF 50V K	*
	C1703	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1704	QETN1AM-107Z	E CAP.	100μF 10V M	*
	C1705-06	QDC31HJ-3R0Z	C CAP.	3.0pF 50V J	*
	C1707	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1708	QFLC1HJ-333Z	M CAP.	0.033μF 50V J	*
	C1709	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1710	QETN1EM-476Z	E CAP.	47μF 25V M	*
	C1711	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1714	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
	C1715	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C1716	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1717	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C1718	QCB31HK-471Z	C CAP.	470pF 50V K	*
	C1751	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
	C1752	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
	C1754	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C1756-57	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1758	QETN1AM-227Z	E CAP.	220µF 10V M	*
	C1759	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1760-61	QDC31HJ-150Z	C CAP.	15pF 50V J	*
	C1762	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1763	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C1764	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1766-68	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1769	QCS31HJ-471Z	C CAP.	470pF 50V J	*
	C1774	QCB31HK-151Z	C CAP.	150pF 50V K	*
	C1775	QCS31HJ-121Z	C CAP.	120pF 50V J	*
	C1776	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1780	QFLC1HJ-104Z	M CAP.	0.1µF 50V J	*
	C1782	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C1801	QETN1CM-107Z	E CAP.	100µF 16V M	*

COIL

⚠	Symbol No.	Part No.	Part Name	Description	Local
	L1001-02	QQL01BK-8R2Z	COIL	8.2µH K	*
	L1003	QQL01BK-221Z	COIL	220µH K	*
	L1301	QQL01BK-390Z	COIL	39µH K	*
	L1601	QQL01BJ-220Z	COIL	22µH J	*
	L1602	QQL01BJ-180Z	COIL	18µH J	*
	L1603	QQL01BK-100Z	COIL	10µH K	*
	L1611-12	CELC005-2R5J7	CHOKE COIL	2.5µH	*
	L1701	QQL01BK-4R7Z	COIL	4.7µH K	*
	L1702	QQL01BK-8R2Z	COIL	8.2µH K	*
	L1752	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	L1753	QQL01BK-4R7Z	COIL	4.7µH K	*

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D1201-11	MTZJ13B-T2	ZENER DIODE		*
	D1214-15	MTZJ13B-T2	ZENER DIODE		*
	D1343	1SS133-T2	SI.DIODE		*
	D1345-48	1SS133-T2	SI.DIODE		*
	D1349	MTZJ6.2B-T2	ZENER DIODE		*
	D1350-53	1SS133-T2	SI.DIODE		*
	D1356	1SS146-T2	SI.DIODE		
	D1357-58	1SS133-T2	SI.DIODE		*
	D1701-02	1SS133-T2	SI.DIODE		*
	D1704	1SS146-T2	SI.DIODE		*
	D1705	1SS133-T2	SI.DIODE		*
	D1710-11	1SS133-T2	SI.DIODE		*
	D1754-58	MTZJ6.2B-T2	ZENER DIODE		*
	D1801-02	1SS133-T2	SI.DIODE		*
	D1804	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q1201-05	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
	Q1208	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q1209-10	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1211	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q1213-14	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
	Q1217	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q1302	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1303-04	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q1342	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q1343-44	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q1346	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1347	2SK301/P/-T	F.E.T.		*
	Q1349-51	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1610	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
	Q1613	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1701-04	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1751-52	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q1801	2PA1015/YG/-T	SI.TRANSISTOR		*

IC

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC1301	CXA1545AS	I.C.(MONO-ANA)		*
	IC1303	TDA9143/N2/S1	I C		
	IC1304	TDA4665	I.C.(MONO-ANA)		*
	IC1305	TDA4780	I.C.(MONO-ANA)		*
	IC1311	AN77L05-T	I.C.(MONO-ANA)		*
	IC1601	MSP3410D-PP-B4	I C		*
	IC1602	BA4558	I.C.(MONO-ANA)		*
	IC1701	M37207MF-150SP	I C		
	IC1702	L78LR05E-MA	I.C.(MONO-ANA)		*
	IC1703	AT24C16-WH3	I.C(EP-ROM)		*
	IC1704	AT24C16-10PC	I.C.(EP-ROM)		*
	IC1751	SDA30C263	MICRO COMPUTER		
	IC1752	M27C1001-WH3	I.C(EP-ROM)		*
	IC1753	AT24C16-10PC	I.C.(EP-ROM)		*
	IC1754	SDA5273-2S	MEGA TEXT		
	IC1755	MSM514400D-60Z	D RAM		
	IC1757	MN1280/Q/	I.C.(DIGI-MOS)		*

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description	Local
		QQR0490-001	NOISE FILTER		
		CEMS009-064	I.C.SOCKET		
		CEMS006-068	IC SOCKET		
		CEMS007-032	IC SOCKET		
	EF1001	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
	EF1610-12	CE42142-103Z	EMI FILTER		*
	K1001	CE41433-001Z	BEADS CORE		*
	K1004	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	K1005	CE41492-001Z	CHOKE COIL		*
	K1009	CE41433-001Z	BEADS CORE		*
	K1011	CE41433-001Z	BEADS CORE		*
	K1013-14	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	K1301	CE41433-001Z	BEADS CORE		*
	K1601	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	K1602	CE41433-001Z	BEADS CORE		*
	K1701-02	CE41433-001Z	BEADS CORE		*
	MD03	------------	IF PWB ASSY	SMC0F701A-U2	
	MD07	------------	AUTO ASPECT MODU	SMC-W001A(U)	
	TU1001	CEEK481-A02	TUNER		
	X1311	CE40749-001Z	CRYSTAL		*
	X1312	CE40668-001Z	CRYSTAL		*
	X1610	CE42546-001Z	CRYSTAL		*
	X1701	CST8.00MTW	CER.RESONATOR		*
	X1751	QAX0307-001	CER.RESONATOR		
	X1752	QAX0351-001Z	X TAL		*

IF P.W.BOARD ASS'Y (SMC0F701A-U2)

This PW Board Ass'y is included in the above MAIN PW Board Ass'y

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R0020	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
	R0021	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
	R0022	NRSA02J-331X	MG R	330Ω 1/10W J	*
	R0023	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0024	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0025	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0026	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
	R0027-28	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
	R0030-31	NRSA02J-150X	MG R	15Ω 1/10W J	*
	R0050-51	NRSA02J-121X	MG R	120Ω 1/10W J	*
	R0052-53	NRSA02J-561X	MG R	560Ω 1/10W J	*
	R0057	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
	R0058	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
	R0059	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0060-61	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0062	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0063	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0064	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0065	NRSA02J-470X	MG R	47Ω 1/10W J	*
	R0070-71	NRSA02J-393X	MG R	39kΩ 1/10W J	*
	R0080-81	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0082	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
	R0101	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0102	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0103	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0104	NRSA02J-121X	MG R	120Ω 1/10W J	*
	R0105	NRSA02J-151X	MG R	150Ω 1/10W J	*

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R0106	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0107	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0108	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0109	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0110	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0111-12	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0113	NRSA02J-221X	MG R	220Ω 1/10W J	*
	R0114	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0115	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0116	NRSA02J-561X	MG R	560Ω 1/10W J	*
	R0117	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0120-24	NRSA02J-103X	MG R	10kΩ 1/10W J	*
	R0125	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
	R0140	NRSA02J-474X	MG R	470kΩ 1/10W J	*
	R0141	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0142	NRSA02J-391X	MG R	390Ω 1/10W J	*
	R0143	NRSA02J-750X	MG R	75Ω 1/10W J	*
	R0144	NRSA02J-684X	MG R	680kΩ 1/10W J	*
	R0145	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0146	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0601	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0602	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0603	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0604	NRSA02J-683X	MG R	68kΩ 1/10W J	*
	R0605-06	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
	R0607	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0608	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C0020	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0022-25	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0026-27	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0030	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0040	NDC21HJ-102X	C CAP.	1000pF 50V J	*
	C0041	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C0042	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0043	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C0044	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0046	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0047	QETN1CM-227Z	E CAP.	220µF 16V M	*
	C0050	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0051	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0052	QAT7004-100		10pF	
	C0053	NDC21HJ-6R0X	C CAP.	6.0pF 50V J	*
	C0054	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0055	QETN1CM-107Z	E CAP	100µF 16V M	*
	C0056	QETN1HM-474Z	E CAP.	0.47µF 50V M	*
	C0057	NDC21HJ-102X	C CAP	1000pF 50V J	*
	C0058	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0059	QAT7004-100		10pF	
	C0060	NDC21HJ-120X	C CAP.	12pF 50V J	*
	C0061	NDC21HJ-7R0X	C CAP.	7.0pF 50V J	*
	C0062	QETN1HM-474Z	E CAP.	0.47µF 50V M	*
	C0063	NCB21HK-103X	C CAP.	0.01µF 50V K	*
	C0064	NCB21HK-472X	C CAP	4700pF 50V K	*
	C0065	QETN1HM-105Z	E CAP	1µF 50V M	*
	C0067	NDC21HJ-120X	C CAP	12pF 50V J	*
	C0069-70	NCB21HK-103X	C CAP	0.01µF 50V K	*
	C0071	QETN1HM-336Z	E CAP	33µF 50V M	*
	C0080-81	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0101	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C0102	NDC21HJ-391X	C CAP.	390pF 50V J	*
	C0103	NDC21HJ-121X	C CAP.	120pF 50V J	*
	C0104	NDC21HJ-221X	C CAP.	220pF 50V J	*
	C0105	NCF21EZ-104X	C CAP.	0.1µF 25V Z	*
	C0140	QETN1HM-335Z	E CAP.	3.3µF 50V M	*
	C0141	NCB21HK-332X	C CAP.	3300pF 50V K	*
	C0142	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0143	QFLC1HJ-683Z	M CAP.	0.068µF 50V J	*
	C0144	QETN1HM-335Z	E CAP.	3.3µF 50V M	*
	C0145	NCB21HK-222X	C CAP.	2200pF 50V K	*
	C0601	QFLC1HJ-183Z	M CAP.	0.018µF 50V J	*
	C0602	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C0603	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C0604	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C0605	QETN1CM-477Z	E CAP.	470µF 16V M	*
	C0606	NCB21HK-103X	C CAP.	0.01µF 50V K	*

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description	Local
	T0020	QQR0626-001	I.F.TRANSF.		*
	T0050	CELT001-307	C.WAVE TRANSF.		*
	T0051	CELT001-306	C.WAVE TRANSF.		*

COIL

⚠	Symbol No.	Part No.	Part Name	Description	Local
	L0020	QQLZ014-R47	PEAKING COIL	0.47µH	*
	L0021	NQL011K-1R5X	COIL	1.5µH	*
	L0030	NQL011K-2R2X	COIL	2.2µH	*
	L0040	NQL011K-120X	COIL	12µH	*
	L0041	NQL011K-100X	COIL	10µH	*
	L0042	NQL011K-330X	COIL	33µH	*
	L0050-53	NQL011K-8R2X	COIL	8.2µH	*
	L0054	NQL011K-330X	COIL	33µH	*
	L0070	NQL011K-5R6X	COIL	5.6µH	*
	L0071	NQL011K-8R2X	COIL	8.2µH	*
	L0101	NQL011K-6R8X	COIL	6.8µH	*
	L0102	NQL011K-100X	COIL	10µH	*
	L0103	NQL011K-8R2X	COIL	8.2µH	*
	L0104	NQL011K-5R6X	COIL	5.6µH	*

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D0020-21	1SS85-T5	SI.DIODE		
	D0050-51	1SS85-T5	SI.DIODE		

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q0012	2SC5083/L-P/-T	SI.TRANSISTOR		*
	Q0080	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0101	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0102	2SA1162/YG/-X	SI.TRANSISTOR		*
	Q0103	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0104	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0106	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0107	2SA1162/YG/-X	SI.TRANSISTOR		*
	Q0108	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0109-11	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0120-26	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0601-02	2SC2712/YG/-X	SI.TRANSISTOR		*

IC

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC0010	TA8865BN	I.C.(MONO-ANA)		*

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CF0010-11	FTP40.40MF	CERAMIC FILTER		*
	CF0012-13	QAX0479-001	SAW FILTER		
	CF0100	TPS5.5MW	CERAMIC FILTER		*
	CF0140	CSB503F30-T2	CER.RESONATOR		*
⚠	R0609	QRZ9017-470	FUSI.RESISTOR	47 Ω 1/4W J	*
	SF0010	QAX0316-001	SAW FILTER		*
	SF0011	CE42574-702	SAW FILTER		
	SF0012	CE42606-701	SAW FILTER		
	W0008	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0013	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0015	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0025-26	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0028-29	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0031-32	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0073-75	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	Y0010	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*

AUTO ASPECT MODULE (SMC-W001A(U))

This PW Board Ass'y is included in the above MAIN PW Board Ass'y

OTHERS

Symbol No.	Part No.	Part Name	Description	Local
	SMC-W001A(U)	AUTO ASPECT MODULE		

POWER DEF P.W.BOARD ASS'Y(SMC-2002A-U2)

AV-32WH3EP

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R2401	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2408	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2409	QRX01GJ-1R0	MF R	1.0Ω 1W J	*
	R2410	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2411	QRG029J-221	OM R	220 Ω 2W J	
	R2412	QRX01GJ-1R8	MF R	1.8Ω 1W J	*
	R2413	QRX01GJ-1R5	MF R	1.5Ω 1W J	*
	R2414	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2415	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2416	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2417	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2418	QRA14CF-6802Y	MF R	68kΩ 1/4W F	
	R2419	QRA14CF-7870Y	MF R	787Ω 1/4W F	
	R2420	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R2421	QRA14CF-1003Y	MF R	100kΩ 1/4W F	
	R2422	QRA14CF-1501Y	MF R	1.5kΩ 1/4W F	
	R2423	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2424	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R2425	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R2426	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2501	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R2502	QRE141J-684Y	C R	680kΩ 1/4W J	*
	R2503	QRE141J-393Y	C R	39kΩ 1/4W J	*
	R2504-05	QRE141J-271Y	C R	270Ω 1/4W J	*
	R2506	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2507	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2508	QRA14CF-2002Y	MF R	20kΩ 1/4W F	
	R2509	QRA14CF-4701Y	MF R	4.7kΩ 1/4W F	
	R2510	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2511	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2513	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2514	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2515	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2516	QRG039J-272	OM R	2.7kΩ 3W J	
	R2517	QRG039J-122	OM R	1.2kΩ 3W J	
	R2518	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2519	QRE141J-220Y	C R	22Ω 1/4W J	*
	R2521	QRE121J-5R6Y	C R	5.6Ω 1/2W J	*
	R2524	QRE121J-471Y	C R	470Ω 1/2W J	*
	R2526	QRE121J-104Y	C R	100kΩ 1/2W J	*
	R2527	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2528	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2529	QRE141J-184Y	C R	180kΩ 1/4W J	*
	R2531	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2533	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2534	QRE121J-562Y	C R	5.6kΩ 1/2W J	*
	R2535	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2536	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2537	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2538	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2539	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2541	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2542	QRE141J-681Y	C R	680Ω 1/4W J	*
	R2543	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2544	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2545	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2546	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2547	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R2548	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R2553	QRE121J-122Y	C R	1.2kΩ 1/2W J	*
	R2554	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2555	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2556	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2557	QRE141J-270Y	C R	27Ω 1/4W J	*
	R2561	QRC121K-103Z	COMP R	10kΩ 1/2W K	*
	R2571	QRG029J-223	OM R	22kΩ 2W J	*
	R2581	QRF104J-100	UNF R	10 Ω 10W J	*
	R2582	QRE121J-331Y	C R	330Ω 1/2W J	*
	R2583	QRE121J-682Y	C R	6.8kΩ 1/2W J	*
	R2584	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2585	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2592	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2593	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2901	QRE121J-331Y	C R	330Ω 1/2W J	*
	R2902	QRF154K-4R7	UNF R		*
	R2903-04	QRE121J-474Y	C R	470kΩ 1/2W J	*
	R2905	QRG039J-333	OM R	33kΩ 3W J	*
	R2906	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2907	QRM059J-R22	MP R	0.22 Ω 5W J	*
	R2910	QRG039J-393	OM R	39kΩ 3W J	
	R2916	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2917	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R2918	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2919	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2920	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2921	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2922	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2923	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2924	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2925	QRE121J-560Y	C R	56Ω 1/2W J	*
	R2951	QRF074J-102	UNF R	1kΩ 7W J	*
	R2952	QRG029J-123	OM R	12kΩ 2W J	*
	R2953	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2954	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2955	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2956	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2957	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2958	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2959	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2962-63	QRG01GJ-220	OM R	22Ω 1W J	*
	R2967-69	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2970	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2971	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2984	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2987	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2988	QRE141J-150Y	C R	15Ω 1/4W J	*
⚠	R2991	QRZ0057-825	C R	8.2MΩ 1W J	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C2401	QFLC2AJ-104Z	M CAP.	0.1µF 100V J	*
	C2402	QETC1VM-337Z	E CAP.	330µF 35V M	*
	C2403	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2404	QCS32HJ-270Z	C CAP.	27pF 500V J	*
	C2405	QFV71HJ-474Z	MF CAP.	0.47µF 50V J	*
	C2406	QFLC2AJ-104Z	M CAP.	0.1µF 100V J	*
	C2407	QFLC2AK-223Z	M CAP.	0.022µF 100V K	*
	C2408-09	QCB32HK-221Z	C CAP.	220pF 500V K	*
	C2410	QFV71HJ-474Z	MF CAP.	0.47µF 50V J	*
	C2411	QETN1HM-226Z	E CAP.	22µF 50V M	*
	C2412	QETM1VM-108	E CAP.	1000µF 35V M	*
	C2413	QCS31HJ-220Z	C CAP.	22pF 50V J	*
	C2415	QDC31HJ-470Z	C CAP.	47pF 50V J	*
	C2416	QCS31HJ-820Z	C CAP.	82pF 50V J	*
	C2501	QFV71HJ-124Z	MF CAP.	0.12µF 50V J	*
	C2502	QETN1CM-108Z	E CAP.	1000µF 16V M	*
	C2503	QETN2AM-106Z	E CAP.	10µF 100V M	*
	C2504	QETN1AM-227Z	E CAP.	220µF 10V M	*
	C2505	QFLC2AJ-102Z	M CAP.	1000pF 100V J	*
	C2506	QCB32HK-331Z	C CAP.	330pF 500V K	*
	C2507	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2508	QFM72DK-103	M CAP.	0.01µF 200V K	*
	C2509	QETN1AM-227Z	E CAP.	220µF 10V M	*
	C2510	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C2512	QCS31HJ-271Z	C CAP.	270pF 50V J	*
	C2520	QFV71HJ-224Z	MF CAP.	0.22µF 50V J	*
	C2521	QFZ0117-1701	M.PP CAP.		*
	C2522	QFZ0117-4701	M.PP CAP.		*
	C2523-24	QFM72DK-683	M CAP.	0.068µF 200V K	*
	C2525	QFZ0117-4701	M.PP CAP.	4700pF	*
	C2526	QFZ0119-684	M.PP CAP.	0.68µF	*
	C2527	QFZ0119-514	M.PP CAP.	0.51µF	*
	C2528	QFZ0128-404	M.PP CAP.	0.4µF	*
	C2529	QFZ0128-204	M.PP CAP.	0.2µF	
	C2532	QCB32HK-561Z	C CAP.	560pF 500V K	*
	C2533	QFZ0194-534	MPP CAP.	0.53µF	
	C2536	QFZ0119-534	M.PP CAP.		*
	C2537	QETM2CM-227	E CAP.	220µF 160V M	*
	C2541	QEZ0195-475Z	E CAP.	4.7µF	*
	C2543	QCB31HK-681Z	C CAP.	680pF 50V K	*
	C2544	QETN1EM-476Z	E CAP.	47µF 25V M	*
	C2545	QETN1AM-107Z	E CAP.	100µF 10V M	*
	C2546	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2547	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C2551	QEN61HM-105Z	BP E CAP.	1µF 50V M	*
	C2552-53	QCB32HK-152Z	C CAP.	1500pF 500V K	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C2554	QETN2EM-106Z	E CAP.	10μF 250V M	*
	C2555-56	QETN1EM-108Z	E CAP.	1000μF 25V M	*
	C2557	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2561	QCZ0122-681	C CAP.	680pF	
	C2581	QETC0JM-107Z	E CAP.	100μF 6.3V M	*
	C2582	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C2584	QCS31HJ-151Z	C CAP.	150pF 50V J	*
⚠	C2902	QFZ9040-473	M.M.CAP.		*
	C2903-05	QCZ9086-472	C CAP.		*
	C2906	QEZ0199-227	E CAP.		
	C2907	QCB32HK-103	C CAP.	0.01μF 500V K	*
	C2908	QCZ0122-151	C CAP.		*
	C2909	QCZ0122-221	C CAP.		*
	C2910	QETN1EM-227Z	E CAP.	220μF 25V M	*
	C2913	QETC1EM-477Z	E CAP.	470μF 25V M	*
	C2914	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2916	QFLC1HJ-102Z	M CAP.	1000pF 50V J	*
	C2917	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C2918	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C2919	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C2920	QFLC1HJ-472Z	M CAP.	4700pF 50V J	*
	C2951	QEZ0203-227	E CAP.	220μF 160V M	
	C2952-53	QEHC1CM-108Z	E CAP.	1000μF 16V M	*
	C2954	QEZ0256-228	E CAP.	2200μF	
	C2956-57	QETB1EM-338	E CAP.	3300μF 25V M	*
	C2958-60	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2966-68	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C2970	QEHC1HM-336Z	E CAP.	33μF 50V M	*
	C2971	QEHC1CM-107Z	E CAP.	100μF 16V M	*
	C2972	QETN1AM-228Z	E CAP.	2200μF 10V M	*
	C2973	QEHC1AM-227Z	E CAP.	220μF 10V M	*
	C2975	QEHB1CM-228	E CAP.	2200μF 16V M	*
	C2976	QEZ0256-228	E CAP.		
	C2977	QEHC1AM-107Z	E CAP.	100μF 10V M	*
	C2978	QCZ0122-151	C CAP.		*
	C2981	QETN1EM-227Z	E CAP.	220μF 25V M	*
	C2982-83	QETN1HM-106Z	E CAP.	10μF 50V M	*
⚠	C2991	QCZ9041-471	C CAP.		*
⚠	C2992	QCZ9041-332	C CAP.		*

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description	Local
	T2501	CE42672-001	DRIVE TRANSF.		*
	T2521	QQR0706-001	PINC.TRANSF.		*
⚠	T2551	CETH021-00AJ1	FBT		*
	T2561	CE42692-001J1	DAF TRANSF.		*
⚠	T2901	CETS089-001J4	SWITCH.TRANSF.		*
	T2981	QQT0147-001	POWER TRANSF.		*

COIL

⚠	Symbol No.	Part No.	Part Name	Description	Local
	L2521	QQR0707-002	LINEARITY COIL		*
	L2541	QQR0705-001	CHOKE COIL		*
	L2551	QQLZ018-560	HEATER CHOKE		*
	L2901-02	QQL401K-100	COIL	10μH K	*
	L2903	QQL42AM-2R7Z	COIL	2.7μH M	*
	L2951	QQLZ018-460	HEATER CHOKE		*
	L2952-53	QQL42AK-100Z	CHOKE COIL	10μH	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D2401	MTZJ75-T2	ZENER DIODE		*
	D2402	BYD33D-T3	SI.DIODE		*
	D2403	1SS133-T2	SI.DIODE		*
	D2404	MTZJ7.5S-T2	ZENER DIODE		*
	D2405	1SS133-T2	SI.DIODE		*
	D2406-09	MA700A-T2	SI.DIODE		*
	D2410	1SS133-T2	SI.DIODE		*
	D2411	MTZJ22B-T2	ZENER DIODE		*
	D2501	BYD33G-T3	SI.DIODE		*
	D2502	MTZJ7.5S-T2	ZENER DIODE		*
	D2504	1SS133-T2	SI.DIODE		*
	D2505	MTZJ6.8A-T2	ZENER DIODE		*
	D2506	1SS146-T2	SI.DIODE		*
	D2507	1SS81-T5	SI.DIODE		*
	D2508	1SS133-T2	SI.DIODE		*
	D2521	FMV-3FU-F1	SI.DIODE		
	D2525	V11CA-C1	SI.DIODE		
	D2541	MTZJ6.8C-T2	ZENER DIODE		*
	D2542	1SS133-T2	SI.DIODE		*
	D2550-51	BYD33G-T3	SI.DIODE		*
	D2552-53	BYW95B-20	SI.DIODE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D2556	BYD33G-T3	SI.DIODE		*
	D2571	MTZJ33B-T2	ZENER DIODE		*
	D2581	MTZJ15B-T2	ZENER DIODE		*
	D2582	MTZJ7.5B-T2	ZENER DIODE		*
	D2585	1SS133-T2	SI.DIODE		*
	D2901	D3SB60	BRIDGE DIODE		
	D2902	BYD33M-T3	SI.DIODE		*
	D2903	1SR124-400A-T2	SI.DIODE		*
	D2904-05	BYD33D-T3	SI.DIODE		*
	D2951-52	RU4C-F1	SI.DIODE		
	D2953	BYD33M-T3	SI.DIODE		*
	D2954-55	BYW95B-20	SI.DIODE		*
	D2956	SF6L20U	SI.DIODE		
	D2958-59	SF6L20U	SI.DIODE		
	D2960	MTZJ5.1A-T2	ZENER DIODE		
	D2961	MTZJ5.6A-T2	ZENER DIODE		*
	D2962-63	1SS133-T2	SI.DIODE		*
	D2964	1SS133-T2	SI.DIODE		
	D2965-66	1SS133-T2	SI.DIODE		*
	D2968	1SS133-T2	SI.DIODE		*
	D2970	1SS133-T2	SI.DIODE		*
	D2981-84	1N4003-T2	SI.DIODE		*
	D2985	1SS133-T2	SI.DIODE		*
	D2986	MTZJ8.2B-T2	ZENER DIODE		*
	D2987	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2403	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2404	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2405-06	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2501	BSN274	F.E.T.		*
	Q2505	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q2506	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2521	2SC5406-RL	SI.TRANSISTOR		*
	Q2523	IRF640	F.E.T.		
	Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q2541	2SD1408/OY/-LB	SI.TRANSISTOR		*
	Q2551	DTA124ESA-T	DIGI.TRANSISTOR		*
	Q2552	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2581	2SA949/Y/Z1	SI.TRANSISTOR		*
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2901	2SK2148-01R-F1	F.E.T.		
	Q2955	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2981	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q2982	2PC1815/YG/-T	SI.TRANSISTOR		*

IC

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC2401	LA7841	I.C.(MONO-ANA)		
	IC2501	TDA9151B	I.C.(DEF-PRO)		*
	IC2541	UPC4558C	I.C.(MONO-ANA)		
	IC2901	MC44603P	I.C.(MONO-ANA)		*
	IC2951	SE135N	I.C.(HYBRID)		*
	IC2952	LM2940CT-12	I.C.(MONO-ANA)		
	IC2953	UPC2409AHF	I.C.(MONO-ANA)		
	IC2954	KIA7808PI	I.C.(MONO-ANA)		*
	IC2955-56	PQ05RF21	I.C.(MONO-ANA)		
	IC2957	KIA7808PI	I.C.(MONO-ANA)		*

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description	Local
⚠	FR2551	QRZ9021-1R0	FUSI.RESISTOR	1.0 Ω	*
⚠	FR2552	QRZ9021-1R0	FUSI.RESISTOR	1.0 Ω	*
⚠	FR2553	QRZ9017-4R7	FUSI.RESISTOR	4.7 Ω	*
	K2401-02	CE41433-001Z	BEADS CORE		*
	K2502-05	QQR0679-001	FERRITE BEADS		
	K2506	CE41433-001Z	BEADS CORE		*
	K2901-04	CE42050-001Z	CORE		*
	K2951	CE41433-001Z	BEADS CORE		*
	K2952-53	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
	PC2521	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C.(PH.COUPLER)		*
	RY2981	CESK028-002	RELAY		*
	TH2901	CEKP002-003	W.P.THERMISTOR		*
	VA2561	ERZV10V112C1	VARISTOR		*

POWER DEF P.W.BOARD ASS'Y(SMC-2003A-U2)

AV-28WH3EP

RESISTOR

Δ	Symbol No.	Part No.	Part Name	Description	Local
	R2401	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2408	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2409	QRX01GJ-1R0	MF R	1.0Ω 1W J	*
	R2410	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2411	QRG029J-221	OM R	220 Ω 2W J	
	R2412	QRX01GJ-1R8	MF R	1.8Ω 1W J	*
	R2413	QRX01GJ-1R5	MF R	1.5Ω 1W J	*
	R2414	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2415	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2416	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2417	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2418	QRA14CF-6802Y	MF R	68kΩ 1/4W F	
	R2419	QRA14CF-7870Y	MF R	787Ω 1/4W F	
	R2420	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R2421	QRA14CF-1003Y	MF R	100kΩ 1/4W F	
	R2422	QRA14CF-1501Y	MF R	1.5kΩ 1/4W F	
	R2423	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2424	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R2425	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R2426	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2501	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R2502	QRE141J-684Y	C R	680kΩ 1/4W J	*
	R2503	QRE141J-393Y	C R	39kΩ 1/4W J	*
	R2504-05	QRE141J-271Y	C R	270Ω 1/4W J	*
	R2506	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2507	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2508	QRA14CF-1962Y	MF R	19.6kΩ 1/4W F	
	R2509	QRA14CF-5101Y	MF R	5.1kΩ 1/4W F	
	R2510	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2511	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2513	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2514	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2515	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2516	QRG039J-272	OM R	2.7kΩ 3W J	
	R2517	QRG039J-122	OM R	1.2kΩ 3W J	
	R2518	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2519	QRE141J-220Y	C R	22Ω 1/4W J	*
	R2521	QRE121J-5R6Y	C R	5.6Ω 1/2W J	*
	R2524	QRE121J-471Y	C R	470Ω 1/2W J	*
	R2526	QRE121J-104Y	C R	100kΩ 1/2W J	*
	R2527	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2528	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2529	QRE141J-154Y	C R	150kΩ 1/4W J	*
	R2531	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2533	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2534	QRE121J-562Y	C R	5.6kΩ 1/2W J	*
	R2535	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2536	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2537	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2538	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R2539	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2541	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R2542	QRE141J-681Y	C R	680Ω 1/4W J	*
	R2543	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2544-45	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2546	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2547	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R2548	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R2553	QRE121J-122Y	C R	1.2kΩ 1/2W J	*
	R2554	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2555	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2556	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2557	QRE141J-270Y	C R	27Ω 1/4W J	*
	R2571	QRG029J-223	OM R	22kΩ 2W J	*
	R2581	QRF104J-100	UNF R	10 Ω 10W J	*
	R2582	QRE121J-331Y	C R	330Ω 1/2W J	*
	R2583	QRE121J-682Y	C R	6.8kΩ 1/2W J	*
	R2584	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2585	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2592	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2593	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2901	QRE121J-331Y	C R	330Ω 1/2W J	*

RESISTOR

Δ	Symbol No.	Part No.	Part Name	Description	Local
	R2902	QRF154K-4R7	UNF R		*
	R2903-04	QRE121J-474Y	C R	470kΩ 1/2W J	*
	R2905	QRG039J-333	OM R	33kΩ 3W J	*
	R2906	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2907	QRM059J-R22	MP R	0.22 Ω 5W J	*
	R2910	QRG039J-393	OM R	39kΩ 3W J	
	R2916	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2917	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R2918	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2919	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2920	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2921	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2922	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2923	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2924	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2925	QRE121J-560Y	C R	56Ω 1/2W J	*
	R2951	QRF074J-102	UNF R	1kΩ 7W J	*
	R2952	QRG029J-123	OM R	12kΩ 2W J	*
	R2953	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2954	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2955	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2956	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2957	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2958	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2959	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2962-63	QRG01GJ-220	OM R	22Ω 1W J	*
	R2967-69	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2970	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2971	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2984	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2987	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2988	QRE141J-150Y	C R	15Ω 1/4W J	*
Δ	R2991	QRZ0057-825	C R	8.2MΩ 1W J	*

CAPACITOR

Δ	Symbol No.	Part No.	Part Name	Description	Local
	C2401	QFLC2AJ-104Z	M CAP.	0.1μF 100V J	*
	C2402	QETC1VM-337Z	E CAP.	330μF 35V M	*
	C2403	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2404	QCS32HJ-270Z	C CAP.	27pF 500V J	*
	C2405	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
	C2406	QFLC2AJ-104Z	M CAP.	0.1μF 100V J	*
	C2407	QFLC2AK-223Z	M CAP.	0.022μF 100V K	*
	C2408-09	QCB32HK-221Z	C CAP.	220pF 500V K	*
	C2410	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
	C2411	QETN1HM-226Z	E CAP.	22μF 50V M	*
	C2412	QETM1VM-108	E CAP.	1000μF 35V M	*
	C2413	QCS31HJ-220Z	C CAP.	22pF 50V J	*
	C2415	QDC31HJ-470Z	C CAP.	47pF 50V J	*
	C2416	QCS31HJ-820Z	C CAP.	82pF 50V J	*
	C2501	QFV71HJ-124Z	MF CAP.	0.12μF 50V J	*
	C2502	QETN1CM-108Z	E CAP.	1000μF 16V M	*
	C2503	QETN2AM-106Z	E CAP.	10μF 100V M	*
	C2504	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2505	QFLC2AJ-102Z	M CAP.	1000pF 100V J	*
	C2506	QCB32HK-331Z	C CAP.	330pF 500V K	*
	C2507	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2508	QFM72DK-103	M CAP.	0.01μF 200V K	*
	C2509	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2510	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C2512	QCS31HJ-271Z	C CAP.	270pF 50V J	*
	C2520	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
	C2521	QFZ0117-1801	M.PP CAP.		*
	C2522	QFZ0117-4501	M.PP CAP.		*
	C2523-24	QFM72DK-683	M CAP.	0.068μF 200V K	*
	C2525	QFZ0117-4001	M.PP CAP.	4000pF 2000V±2.5%	
	C2526	QFZ0119-434	M.PP CAP.	0.43μF 200V ±3%	*
	C2527	QFZ0119-514	M.PP CAP.	0.51μF 200V ±3%	*
	C2528	QFZ0119-304	M.PP CAP.	0.3μF 200V ±3%	*
	C2529	QFZ0128-204	M.PP CAP.	0.2μF 400V ±3%	
	C2532	QCB32HK-561Z	C CAP.	560pF 500V K	*
	C2533	QFZ0194-304	M.PP CAP.	0.3μF 200V ±3%	*
	C2536	QFZ0119-534	M.PP CAP.	0.53μF 200V ±3%	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C2537	QETM2CM-227	E CAP.	220µF 160V M	*
	C2541	QEZ0195-475Z	E CAP.	4.7µF	*
	C2543	QCB31HK-681Z	C CAP.	680pF 50V K	*
	C2544	QETN1EM-476Z	E CAP.	47µF 25V M	*
	C2545	QETN1AM-107Z	E CAP.	100µF 10V M	*
	C2546	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2547	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C2551	QEN61HM-105Z	BP E CAP.	1µF 50V M	*
	C2552-53	QCB32HK-152Z	C CAP.	1500pF 500V K	*
	C2554	QETN2EM-106Z	E CAP.	10µF 250V M	*
	C2555-56	QETN1EM-108Z	E CAP.	1000µF 25V M	*
	C2557	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2581	QETC0JM-107Z	E CAP.	100µF 6.3V M	*
	C2582	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C2584	QCS31HJ-151Z	C CAP.	150pF 50V J	*
⚠	C2902	QFZ9040-473	M.M.CAP.	0.047µF	*
	C2903-05	QCZ9086-472	C CAP.	4700pF	*
	C2906	QEZ0199-227	E CAP.	220µF	
	C2907	QCB32HK-103	C CAP.	0.01µF 500V K	*
	C2908	QCZ0122-151	C CAP.	150pF 200V K	*
	C2909	QCZ0122-221	C CAP.	220pF 2000V K	*
	C2910	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2913	QETC1EM-477Z	E CAP.	470µF 25V M	*
	C2914	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2916	QFLC1HJ-102Z	M CAP.	1000pF 50V J	*
	C2917	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C2918	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C2919	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C2920	QFLC1HJ-472Z	M CAP.	4700pF 50V J	*
	C2951	QEZ0203-227	E CAP.	220µF 160V M	
	C2952-53	QEHC1CM-108Z	E CAP.	1000µF 16V M	*
	C2954	QEZ0256-228	E CAP.		
	C2956-57	QETB1EM-338	E CAP.	3300µF 25V M	*
	C2958-60	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2966-68	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C2970	QEHC1HM-336Z	E CAP.	33µF 50V M	*
	C2971	QEHC1CM-107Z	E CAP.	100µF 16V M	*
	C2972	QETN1AM-228Z	E CAP.	2200µF 10V M	*
	C2973	QEHC1AM-227Z	E CAP.	220µF 10V M	*
	C2975	QEHB1CM-228	E CAP.	2200µF 16V M	*
	C2976	QEZ0256-228	E CAP.	2200µF	
	C2977	QEHC1AM-107Z	E CAP.	100µF 10V M	*
	C2978	QCZ0122-151	C CAP.	150pF 200V K	*
	C2981	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2982-83	QETN1HM-106Z	E CAP.	10µF 50V M	*
⚠	C2991	QCZ9041-471	C CAP.		*
⚠	C2992	QCZ9041-332	C CAP.		*

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description	Local
	T2501	CE42672-001	DRIVE TRANSF		*
	T2521	QQR0706-001	PINC.TRANSF		*
⚠	T2551	CETH020-00AJ1	H.V.TRANSF.		*
⚠	T2901	CETS089-001J4	SWITCH.TRANSF.		*
	T2981	QQT0147-001	POWER TRANSF.		*

COIL

⚠	Symbol No.	Part No.	Part Name	Description	Local
	L2521	QQR0707-001	LINEARITY COIL		*
	L2541	QQR0705-001	CHOKE COIL		*
	L2551	QQLZ018-460	HEATER CHOKE		*
	L2901-02	QQL401K-100	COIL	10µH K	*
	L2903	QQL42AM-2R7Z	COIL	2.7µH M	*
	L2951	QQLZ018-460	HEATER CHOKE		*
	L2952-53	QQL42AK-100Z	CHOKE COIL	10µH	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D2401	MTZJ75-T2	ZENER DIODE		*
	D2402	BYD33D-T3	SI.DIODE		*
	D2403	1SS133-T2	SI.DIODE		*
	D2404	MTZJ7.5S-T2	ZENER DIODE		*
	D2405	1SS133-T2	SI.DIODE		*
	D2406-09	MA700A-T2	SI.DIODE		*
	D2410	1SS133-T2	SI.DIODE		*
	D2411	MTZJ22B-T2	ZENER DIODE		*
	D2501	BYD33G-T3	SI.DIODE		*
	D2502	MTZJ7.5S-T2	ZENER DIODE		*
	D2504	1SS133-T2	SI.DIODE		*
	D2505	MTZJ6.8A-T2	ZENER DIODE		*
	D2506	1SS146-T2	SI.DIODE		*
	D2507	1SS81-T5	SI.DIODE		*
	D2508	1SS133-T2	SI.DIODE		*

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D2521	FMV-3FU-F1	SI.DIODE		
	D2525	V11CA-C1	SI.DIODE		
	D2541	MTZJ6.8C-T2	ZENER DIODE		*
	D2542	1SS133-T2	SI.DIODE		*
	D2550-51	BYD33G-T3	SI.DIODE		*
	D2552-53	BYW95B-20	SI.DIODE		*
	D2556	BYD33G-T3	SI.DIODE		*
	D2571	MTZJ33B-T2	ZENER DIODE		*
	D2581	MTZJ15B-T2	ZENER DIODE		*
	D2582	MTZJ7.5B-T2	ZENER DIODE		*
	D2585	1SS133-T2	SI.DIODE		*
	D2901	D3SB60	BRIDGE DIODE		
	D2902	BYD33M-T3	SI.DIODE		*
	D2903	1SR124-400A-T2	SI.DIODE		*
	D2904-05	BYD33D-T3	SI.DIODE		*
	D2951-52	RU4C-F1	SI.DIODE		
	D2953	BYD33M-T3	SI.DIODE		*
	D2954-55	BYW95B-20	SI.DIODE		*
	D2956	SF6L20U	SI.DIODE		
	D2958-59	SF6L20U	SI.DIODE		
	D2960	MTZJ5.1A-T2	ZENER DIODE		*
	D2961	MTZJ5.6A-T2	ZENER DIODE		*
	D2962-66	1SS133-T2	SI.DIODE		*
	D2968	1SS133-T2	SI.DIODE		*
	D2970	1SS133-T2	SI.DIODE		*
	D2981-84	1N4003-T2	SI.DIODE		*
	D2985	1SS133-T2	SI.DIODE		*
	D2986	MTZJ8.2B-T2	ZENER DIODE		*
	D2987	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2403	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2404	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2405-06	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2501	BSN274	F.E.T.		*

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q2505	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q2506	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2521	2SC5406-RL	SI.TRANSISTOR		*
	Q2523	IRF640	F.E.T.		
	Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q2541	2SD1408/0Y/-LB	SI.TRANSISTOR		*
	Q2551	DTA124ESA-T	DIGI.TRANSISTOR		*
	Q2552	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2581	2SA949/Y/Z1	SI.TRANSISTOR		*
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2901	2SK2148-01R-F1	F.E.T.		
	Q2955	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2981	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q2982	2PC1815/YG/-T	SI.TRANSISTOR		*

IC

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC2401	LA7841	I.C.(MONO-ANA)		
	IC2501	TDA9151B	I.C.(DEF-PRO)		*
	IC2541	UPC4558C	I.C.(MONO-ANA)		
	IC2901	MC44603P	I.C.(MONO-ANA)		*
	IC2951	SE135N	I.C.(HYBRID)		*
	IC2952	LM2940CT-12	I.C.(MONO-ANA)		
	IC2953	UPC2409AHF	I.C.(MONO-ANA)		
	IC2954	KIA7808PI	I.C.(MONO-ANA)		*
	IC2955-56	PQ05RF21	I.C.(MONO-ANA)		
	IC2957	KIA7808PI	I.C.(MONO-ANA)		*

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description	Local
⚠	FR2551	QRZ9021-1R0	FUSI.RESISTOR		*
⚠	FR2552	QRZ9021-1R0	FUSI.RESISTOR		*
⚠	FR2553	QRZ9017-4R7	FUSI.RESISTOR		*
	K2401-02	CE41433-001Z	BEADS CORE		*
	K2502-05	QQR0679-001	FERRITE BEADS		
	K2506	CE41433-001Z	BEADS CORE		*
	K2901-04	CE42050-001Z	CORE		*
	K2951	CE41433-001Z	BEADS CORE		*
	K2952-53	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
	PC2521	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C.(PH.COUPLER)		*
	RY2981	CESK028-002	RELAY		*
	TH2901	CEKP002-003	W.P.THERMISTOR		*

CRT SOCKET PW BOARD ASS'Y (SMC-3002A-U2)

AV-32WH3EP

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R3101	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3102	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R3103	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3104	QRE141J-820Y	C R	82Ω 1/4W J	*
	R3105	QRE141J-331Y	C R	330Ω 1/4W J	*
	R3106	QRJ146J-100X	C R	10Ω 1/4W J	*
	R3107-08	QRE141J-470Y	C R	47Ω 1/4W J	*
⚠	R3109	QRZ9021-561	FUSI.R		*
	R3110	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3111	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3112	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3113-14	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R3115	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3116	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3117	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3118	QRE141J-121Y	C R	120Ω 1/4W J	*
	R3119	QRL029J-391	OM R	390Ω 2W J	*
	R3120	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R3121	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R3122	QRE141J-221Y	C R	220Ω 1/4W J	*
	R3123	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R3124	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R3125	QRE141J-181Y	C R	180Ω 1/4W J	*
	R3126	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R3127	QRE141J-681Y	C R	680Ω 1/4W J	*
	R3128	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3130	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3204-06	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3207	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3208	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R3211	QRE141J-334Y	C R	330kΩ 1/4W J	*
	R3223-25	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3227	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3228	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R3229-31	QRG01GJ-823	OM R	82kΩ 1W J	*
	R3232-34	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K	*
	R3239	QRC121K-474Z	COMP.R	470kΩ 1/2W K	*
	R3240	QRC121K-102Z	COMP.R	1kΩ 1/2W K	*
	R3241	QRC121K-105Z	COMP.R	1MΩ 1/2W K	*
	R3301-02	QRE121J-474Y	C R	470kΩ 1/2W J	*
	R3303-04	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R3305	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3306	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R3307	QRE141J-101Y	C R	100Ω 1/4W J	*
	R3308	QRE141J-471Y	C R	470Ω 1/4W J	*
	R3309	QRE141J-390Y	C R	39Ω 1/4W J	*

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C3101	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3102	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
	C3103	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C3104	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3105	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C3106	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3107	QETN2CM-106Z	E CAP.	10μF 160V M	*
	C3108-09	QCB32HK-472Z	C CAP.	4700pF 500V K	*
	C3110	QETN2CM-106Z	E CAP	10μF 160V M	*
	C3111-12	QETN1AM-107Z	E CAP	100μF 10V M	*
	C3113	QETN1AM-337Z	E CAP.	330μF 10V M	*
	C3114	QCS32HJ-470Z	C CAP.	47pF 500V J	*
	C3115	QCS31HJ-5R0Z	C CAP.	5.0pF 50V J	*
	C3116	QCS31HJ-390Z	C CAP.	39pF 50V J	*
	C3117	QCS31HJ-151Z	C CAP.	150pF 50V J	*
	C3118	QETN1HM-106Z	E CAP	10μF 50V M	*
	C3201-03	QCS31HJ-8R0Z	C CAP.	8.0pF 50V J	*
	C3204-09	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C3210-12	QFK62EK-104Z	MM CAP.	0.1μF 250V K	*
	C3213-15	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3216	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3218	QETM2EM-336	E CAP.	33μF 250V M	*
	C3219	QFZ0097-223	M M CAP.	0.022μF 1250V K	*
	C3221	QETN2EM-106Z	E CAP.	10μF 250V M	*
	C3301	QETN1CM-107Z	E CAP.	100μF 16V M	*

COIL

⚠	Symbol No.	Part No.	Part Name	Description	Local
	L3101	QQL01BK-150Z	COIL	15μH K	*
	L3201-03	QQL01BK-4R7Z	COIL	4.7μH K	*

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D3101-02	RH1S-T3	SI.DIODE		*
	D3103	MA165-T2	SI.DIODE		*
	D3151	1SS133-T2	SI.DIODE		*
	D3204-06	EU01N-T2	SI.DIODE		
	D3301	1SS252-T2	SI.DIODE		*
	D3302-03	1SS133-T2	SI.DIODE		*

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q3101	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3102-03	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3104	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3105	2SA1837	SI.TRANSISTOR		*
	Q3106	2SC4793	SI.TRANSISTOR		*
	Q3107	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3108	2SC1906-T	SI.TRANSISTOR		*
	Q3301	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q3302	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q3303	2PA1015/YG/-T	SI.TRANSISTOR		*

IC

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC3201-03	TDA6111Q	I.C.(MONO-ANA)		*

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description	Local
	K3101-04	CE41492-001Z	CHOKE COIL		*
	K3105	CE41433-001Z	BEADS CORE		*
⚠	SK3001	CE42670-001	C.R.T.SOCKET		

CRT SOCKET PW BOARD ASS'Y (SMC-3003A-U2)

AV-28WH3EP

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R3101	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3102	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R3103	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3104	QRE141J-820Y	C R	82Ω 1/4W J	*
	R3105	QRE141J-331Y	C R	330Ω 1/4W J	*
	R3106	QRJ146J-100X	C R	10Ω 1/4W J	*
	R3107-08	QRE141J-470Y	C R	47Ω 1/4W J	*
⚠	R3109	QRZ9021-561	FUSI.R		*
	R3110	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3111	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3112	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3113-14	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R3115	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3116	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3117	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3118	QRE141J-121Y	C R	120Ω 1/4W J	*
	R3119	QRL029J-391	OM R	390Ω 2W J	*
	R3120	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R3121	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R3122	QRE141J-221Y	C R	220Ω 1/4W J	*
	R3123	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R3124	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R3125	QRE141J-181Y	C R	180Ω 1/4W J	*
	R3126	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R3127	QRE141J-681Y	C R	680Ω 1/4W J	*
	R3128	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3130	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3204-06	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3207	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3208	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R3211	QRE141J-334Y	C R	330kΩ 1/4W J	*
	R3223-25	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3227	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3228	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R3229-31	QRG01GJ-823	OM R	82kΩ 1W J	*
	R3232-34	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K	*
	R3239	QRC121K-474Z	COMP.R	470kΩ 1/2W K	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3240	QRC121K-102Z	COMP.R	1kΩ 1/2W K	*
	R3241	QRC121K-105Z	COMP.R	1MΩ 1/2W K	*
	R3301-02	QRE121J-474Y	C R	470kΩ 1/2W J	*
	R3303-04	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R3305	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3306	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R3307	QRE141J-101Y	C R	100Ω 1/4W J	*
	R3308	QRE141J-471Y	C R	470Ω 1/4W J	*
	R3309	QRE141J-390Y	C R	39Ω 1/4W J	*
	CAPACITOR				
	C3101	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C3102	QFLC1HJ-103Z	M CAP.	0.01µF 50V J	*
	C3103	QETN1HM-335Z	E CAP.	3.3µF 50V M	*
	C3104	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C3105	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C3106	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3107	QETN2CM-106Z	E CAP.	10µF 160V M	*
	C3108-09	QCB32HK-472Z	C CAP.	4700pF 500V K	*
	C3110	QETN2CM-106Z	E CAP.	10µF 160V M	*
	C3111-12	QETN1AM-107Z	E CAP.	100µF 10V M	*
	C3113	QETN1AM-337Z	E CAP.	330µF 10V M	*
	C3114	QCS32HJ-470Z	C CAP.	47pF 500V J	*
	C3115	QCS31HJ-5R0Z	C CAP.	5.0pF 50V J	*
	C3116	QCS31HJ-390Z	C CAP.	39pF 50V J	*
	C3117	QCS31HJ-151Z	C CAP.	150pF 50V J	*
	C3118	QETN1HM-106Z	E CAP.	10µF 50V M	*
	C3201-03	QCS31HJ-8R0Z	C CAP.	8.0pF 50V J	*
	C3204-09	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C3210-12	QFK62EK-104Z	MM CAP.	0.1µF 250V K	*
	C3213-15	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3216	QETN1CM-107Z	E CAP.	100µF 16V M	*
	C3218	QETM2EM-336	E CAP	33µF 250V M	*
	C3219	QFZ0097-223	M M CAP.	0.022µF 1250V K	*
	C3221	QETN2EM-106Z	E CAP.	10µF 250V M	*
	C3301	QETN1CM-107Z	E CAP.	100µF 16V M	*
	COIL				
	L3101	QQL01BK-150Z	COIL	15µH K	*
	L3201-03	QQL01BK-4R7Z	COIL	4.7µH K	*
	DIODE				
	D3101-02	RH1S-T3	SI.DIODE		*
	D3103	MA165-T2	SI.DIODE		*
	D3151	1SS133-T2	SI.DIODE		*
	D3204-06	EU01N-T2	SI.DIODE		
	D3301	1SS252-T2	SI.DIODE		*
	D3302-03	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q3101	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3102-03	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3104	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3105	2SA1837	SI.TRANSISTOR		*
	Q3106	2SC4793	SI.TRANSISTOR		*
	Q3107	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3108	2SC1906-T	SI.TRANSISTOR		*
	Q3301	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q3302	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q3303	2PA1015/YG/-T	SI.TRANSISTOR		*
	IC				
	IC3201-03	TDA6111Q	I.C.(MONO-ANA)		*
	OTHERS				
	K3101-04	CE41492-001Z	CHOKE COIL		*
	K3105	CE41433-001Z	BEADS CORE		*
⚠	SK3001	CE42535-001J1	C.R.T.SOCKET		*

AUDIO PW BOARD ASS'Y (SMC-6002A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R6102	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R6103	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R6104-05	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R6106	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R6107-09	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R6110	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R6111	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R6112-13	QRE141J-561Y	C R	560Ω 1/4W J	*
	R6114-15	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R6116-17	QRK126J-4R7X	C R	4.7Ω 1/2W J	*
	R6120-22	QRE141J-104Y	C R	100kΩ 1/4W J	*
	CAPACITOR				
	C6101-02	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C6105-08	QFV71HJ-224Z	MF CAP.	0.22µF 50V J	*
	C6109	QETN1HM-475Z	E CAP.	4.7µF 50V M	*
	C6110-11	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C6112-13	QETM1EM-228	E CAP.	2200µF 25V M	*
	C6115	QENC1EM-226Z	BP E CAP.	22µF 25V M	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D6101-04	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q6101	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q6102-03	DTC323TS-T	DIGI.TRANSISTOR		*
	Q6104	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q6107-08	2PC1815/YG/-T	SI.TRANSISTOR		*
	IC				
	IC6001	TDA7265	I.C.(DIGI-OTHER)		*
	OTHERS				
	K6001-02	CE41433-001Z	BEADS CORE		*

AV TERMINAL PW BOARD ASS'Y (SMC0J001A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0104	QRE141J-750Y	C R	75Ω 1/4W J	*
	R0106	QRE141J-750Y	C R	75Ω 1/4W J	*
	R0108	QRE141J-750Y	C R	75Ω 1/4W J	*
	R0112	QRE141J-750Y	C R	75Ω 1/4W J	*
	R0204	QRE141J-750Y	C R	75Ω 1/4W J	*
	CAPACITOR				
	C0102-04	QEKC1CM-106Z	E CAP.	10µF 16V M	
	C0105-08	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C0109	QETN1AM-108Z	E CAP.	1000µF 10V M	*
	C0202	QCB31HK-103Z	C CAP.	0.01µF 50V K	*
	C0203-06	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C0209	QETN1AM-108Z	E CAP.	1000µF 10V M	*
	COIL				
	L0101-04	QQL211K-5R6Y	COIL	5.6µH K	*
	L0105	CE41832-001Z	LEAD CORE		*
	L0201-04	QQL211K-5R6Y	COIL	5.6µH K	*
	L0205	CE41832-001Z	LEAD CORE		*
	DIODE				
	D0101-03	MTZJ13B-T2	ZENER DIODE		*
	OTHERS				
	J0001-02	CE40529-006	SCART CONNECTOR		

FRONT CONTROL PW BOARD ASS'Y (SMC-8002A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R8001-02	QRE121J-271Y	C R	270Ω 1/2W J	*
	R8003	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R8004	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R8005	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R8008	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R8009	QRE141J-105Y	C R	1MΩ 1/4W J	*
	R8010	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R8011	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R8012	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R8013	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R8014	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R8015-17	QRE141J-750Y	C R	75Ω 1/4W J	*
	R8020-21	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R8035	QRE141J-391Y	C R	390Ω 1/4W J	*
	R8037	QRE141J-561Y	C R	560Ω 1/4W J	*
	R8039	QRE141J-821Y	C R	820Ω 1/4W J	*
	CAPACITOR				
	C8001-02	QCB31HK-222Z	C CAP.	2200pF 50V K	*
	C8003	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8004	QCZ0120-104Z	C CAP.		*
	C8005	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8010-11	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C8019	QETC1CM-107Z	E CAP.	100μF 16V M	*
	C8021	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
⚠	C8901	QFZ9040-474	M.F.CAP	0.47μF	*
	COIL				
	L8001	CE41832-001Z	LEAD CORE		*
	L8002-03	QQL211K-5R6Y	COIL	5.6μH K	*
	L8004-05	CE41832-001Z	LEAD CORE		*
	L8010-11	QQL211K-270Y	COIL	27μH K	*
	L8012	CE41832-001Z	LEAD CORE		*
	DIODE				
	D8007	P1201	C.D.S.		*
	D8008	1SS133-T2	SI.DIODE		*
	D8009	SLR-342MG-T16	L.E.D.(GRN)	ECO	*
	D8010	SPR-39MVWF	L.E.D.	POWER	*
	D8011	1SS133-T2	SI.DIODE		*
	D8012	SLR-342DU-T16	L.E.D.(ORG)	TIMER	*
	D8013	SLR-342YY-T16	L.E.D.(YLW)	MULTIM SOUND	*
	D8014	MTZJ6.8A-T2	ZENER DIODE		*
	D8018	MTZJ5.1B-T2	ZENER DIODE		*
	TRANSISTOR				
	Q8001	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q8002	DTC144ESA-T	DIGI TRANSISTOR		*
	Q8003-04	DTA144ESA-T	DIGI TRANSISTOR		*
	IC				
	IC8001	GP1U281Q	IFR DETECT UNIT		*
	OTHERS				
		CM36548-001-E	L.E.D.HOLDER		*
		CM35921-A04-H	CDS HOLDER		*
		CEMG002-001Z	FUSE CLIP	x2	*
⚠	F8901	QMF51D2-3R15J1	FUSE	3.15A	*
	J8001	QMS3007-C01	HEADPHONE JACK		*
	J8003	QMD2B04-002	MINI CONNECTOR		*
	J8004	CEMN011-001	JACK		*
	J8005	CEMN011-002	JACK		*
	J8006	CEMN011-003	JACK		*
⚠	LF8901	CELF012-001J7	LINE FILTER		*
⚠	LF8902	CELF012-001J7	LINE FILTER		*
	S8001	CESP001-001	PUSH SWITCH	CH UP/DOWN	*
	S8002	CESP001-001	PUSH SWITCH	MENU	*
⚠	S8901	QSP4K21-C01	PUSH SWITCH	MAIN POWER	*

100Hz PW BOARD ASS'Y (SMC0Z001A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0001-02	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0004-05	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0008-09	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0011-16	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0018-27	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0101	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0102	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0103	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0104	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0105	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0106	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0107	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0108	NRSA02J-150X	MG R	15Ω 1/10W J	*
	R0109	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0110	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0111	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0112	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0113	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0114	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0115	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0116	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0117	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0118	NRSA02J-330X	MG R	33Ω 1/10W J	*
	R0119	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0120	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0121	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0122	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0123	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0124	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0125	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0126	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0127	NRSA02J-330X	MG R	33Ω 1/10W J	*
	R0128	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0129-30	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0131	NRSA02J-391X	MG R	390Ω 1/10W J	*
	R0132	NRSA02J-821X	MG R	820Ω 1/10W J	*
	R0133	NRSA02J-750X	MG R	75Ω 1/10W J	*
	R0134	NRSA02J-100X	MG R	10Ω 1/10W J	*
	R0135-37	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0145-47	NRSA02J-221X	MG R	220Ω 1/10W J	*
	R0148	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0149-51	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0152	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0153-55	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0201-24	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0302	NRVA02D-153X	MF R	15kΩ 1/10W D	*
	R0303	NRVA02D-113X	MF R	11kΩ 1/10W D	*
	R0304-06	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0307	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
	R0308	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0309	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0310	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0311-12	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0313	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0314-15	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0316	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0317-18	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0319	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0320	NRSA02J-683X	MG R	68kΩ 1/10W J	*
	R0321	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0322	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0323	NRSA02J-103X	MG R	10kΩ 1/10W J	*
	R0324	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0325	NRSA02J-181X	MG R	180Ω 1/10W J	*

RESISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
R0326	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0327	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0328	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0329	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0330	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0332	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R0333	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R0334	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0335	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0336	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0337	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0338	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0339	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0340	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0342	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R0343	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R0344	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0345	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0346	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0347	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0348	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0349	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0350	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0351	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0352	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0353	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0354-56	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0361	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0362	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0363	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0401	NRSA02J-221X	MG R	220Ω 1/10W J	*
R0402	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0403	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0404	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R0405	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R0406	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R0407	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0408-09	NRSA02J-680X	MG R	68Ω 1/10W J	*
R0410	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0412	NRSA02J-180X	MG R	18Ω 1/10W J	*
R0414	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0415-16	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0417	NRSA02J-680X	MG R	68Ω 1/10W J	*
R0418	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0421	QRN143J-221X	C R	220Ω 1/4W J	*
R0423	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*

CAPACITOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
C0001	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0002	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0003	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0004	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0005	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0006	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0007	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0008	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0009-10	QETM1AM-108	E CAP.	1000μF 10V M	*
C0101	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0102	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0103	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0104	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0106	NEH71HM-105X	E CAP.	1μF 50V M	
C0107	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0108	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0109	NEH71CM-476X	E CAP.	47μF 16V M	

CAPACITOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
C0111	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0112	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0113	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0114	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0116	NEH71HM-105X	E CAP.	1μF 50V M	
C0117	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0118	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0121	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0122	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0123	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0124	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0126	NEH71CM-106X	E CAP.	10μF 16V M	
C0127	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0128	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0131	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0132	NEH71CM-476X	E CAP.	47μF 16V M	
C0133-34	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0135-36	NEH71CM-106X	E CAP.	10μF 16V M	
C0137	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0138	NEH71CM-476X	E CAP.	47μF 16V M	
C0139	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0142-47	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0148	NEH71CM-476X	E CAP.	47μF 16V M	
C0151-54	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0155	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0201	NEH71CM-476X	E CAP.	47μF 16V M	
C0202-05	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0301	NEH71CM-476X	E CAP.	47μF 16V M	
C0302-07	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0308	NEH71CM-476X	E CAP.	47μF 16V M	
C0309	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0313	NCS21HJ-152X	C CAP.	1500pF 50V J	*
C0314-18	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0321	NEH71HM-105X	E CAP.	1μF 50V M	
C0322	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0323	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0324	NEH71CM-476X	E CAP.	47μF 16V M	
C0331	NEH71HM-105X	E CAP.	1μF 50V M	
C0332	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0333	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0341	NEH71CM-106X	E CAP.	10μF 16V M	
C0342	NEH71HM-105X	E CAP.	1μF 50V M	
C0343	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0401	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0402	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0403	NEH71CM-476X	E CAP.	47μF 16V M	
C0404	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0405	NEH71CM-476X	E CAP.	47μF 16V M	
C0406-07	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0408	NEH71CM-476X	E CAP.	47μF 16V M	
C0409-10	NDC21HJ-270X	C CAP.	27pF 50V J	*
C0411	NDC21HJ-180X	C CAP.	18pF 50V J	*
C0412-13	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0414	NEH71CM-476X	E CAP.	47μF 16V M	
C0415-16	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0417	NDC21HJ-270X	C CAP.	27pF 50V J	*

COIL

⚠ Symbol No.	Part No.	Part Name	Description	Local
L0001-02	NQL02BJ-4R7X	COIL	4.7μH	*
L0003-04	NQL02BJ-100X	COIL	10μH	*
L0005-07	NQL02BJ-4R7X	COIL	4.7μH	*
L0008	NQL02BJ-100X	COIL	10μH	*
L0009	NQL02BJ-4R7X	COIL	4.7μH	*
L0101	NQL011K-3R3X	COIL	3.3μH	*
L0111	NQL011K-3R3X	COIL	3.3μH	*

COIL

⚠ Symbol No.	Part No.	Part Name	Description	Local
L0121	NQL011K-3R3X	COIL	3.3µH	*
L0301-04	NQL02BJ-100X	COIL	10µH	*
L0401-02	NQL02BJ-330X	COIL	33µH	*

DIODE

⚠ Symbol No.	Part No.	Part Name	Description	Local
D0401	MA3027-X	CHIP ZENER DIODE		*

TRANSISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q0101	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0102	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0103	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0104	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0111	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0112	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0113	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0114	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0121	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0122	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0123	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0124	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0131	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0321	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0322	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0323	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0324	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0331	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0332	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0333	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0334	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0341	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0342	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0343	2SC2712/YG/-X	SI.TRANSISTOR		*

TRANSISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q0344-45	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0351	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0361	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0401	2SC2712/YG/-X	SI.TRANSISTOR		*

IC

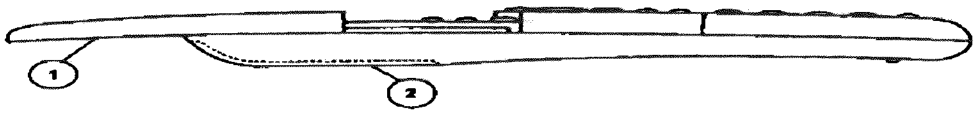
⚠ Symbol No.	Part No.	Part Name	Description	Local
IC0101	SDA9205-2-W	I.C.(DIGI-MOS)		*
IC0201	SDA9255	IC		
IC0301	SDA9280-W	I.C.(DIGI-OTHER)		*
IC0401	SDA9257	I.C.(DIGI-OTHER)		*
IC0402	MC74F04M-X	I C		
IC0403	TC74AC00F-X	I C		

OTHERS

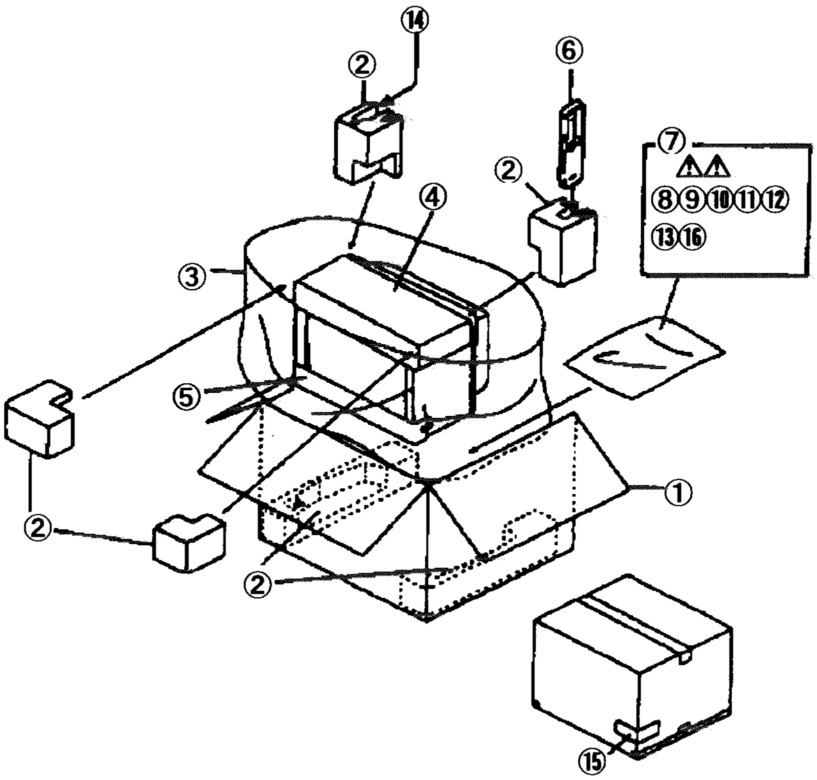
⚠ Symbol No.	Part No.	Part Name	Description	Local
DL0321	NQR0241-001X	L.P.F		*
DL0331	NQR0241-001X	L.P.F		*
DL0341	NQR0242-001X	L.P.F		*
EF0001-05	CE42482-103Y	EMI FILTER		*
EF0006	CE42482-101Y	EMI FILTER		
EF0101	CE42482-470Y	EMI FILTER		*
EF0111	CE42482-470Y	EMI FILTER		*
EF0121	CE42482-470Y	EMI FILTER		*
EF0131	CE42482-103Y	EMI FILTER		*
EF0132	CE42482-101Y	EMI FILTER		
EF0321	CE42482-470Y	EMI FILTER		*
EF0331	CE42482-470Y	EMI FILTER		*
EF0341-42	CE42482-470Y	EMI FILTER		*
EF0351	CE42482-470Y	EMI FILTER		*
EF0361	CE42482-101Y	EMI FILTER		
EF0401	CE42482-470Y	EMI FILTER		*
EF0402	CE42126-101Y	EMI FILTER		
K0001	CE41433-001Z	BEADS CORE		*
X0401	QAX0350-001	X TAL		

REMOTE CONTROL UNIT PARTS LIST (RM-C795-1E)

⚠ Symbol No.	Part No.	Part Name.	Description	Local
1	BGV110303A	SLIDE COVER		*
2	BGV110201A	BATTERY COVER		*



PACKING



PACKING PARTS LIST

AV-32WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	AEM1002-A43-E	PACKING CASE		*
	2	CP11549-B0B-E	CUSHION ASSY		*
	3	AEM1004-A07-E	SET COVER		*
	4	AEM3022-003-E	CUSHION SHEET		*
	5	CP40193-010-E	CUSHION SHEET		*
	6	RM-C795-1E	REMOCON UNIT		*
	7	AEM3021-001-E	POLY BAG		*
	8	BT-20066A-E	ADDRESS CARD		*
⚠	9	LCT0155-001A-U	INST BOOK		*
⚠	10	LCT0156-001A-U	INST BOOK		*
	11	BT-54008-1E	WARRANTY CARD		*
	12	LC10102-003A-U	X-RAY CARD		*
	13	LCT0065-001A-U	WARNING SHEET		*
	14	AEEAK001-200	RF CABLE		*
	15	AEM1038-089-E	EURO LABEL		*
	16	2832WH3EP-HSAE	S.DIAGRAM	ONLY ITALY	*

AV-28WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	AEM1002-A44-E	PACKING CASE		*
	2	CP11547-A0B-E	CUSHION ASSY		*
	3	AEM1004-A06-E	SET COVER		*
	4	CP40193-009-E	CUSHION SHEET		*
	5	CP40193-010-E	CUSHION SHEET		*
	6	RM-C795-1E	REMOCON UNIT		*
	7	AEM3021-001-E	POLY BAG		*
	8	BT-20066A-E	ADDRESS CARD		*
⚠	9	LCT0155-001A-U	INST BOOK		*
⚠	10	LCT0156-001A-U	INST BOOK		*
	11	BT-54008-1E	WARRANTY CARD		*
	12	LC10102-004A-U	X-RAY CARD		*
	13	LCT0065-001A-U	WARNING SHEET		*
	14	AEEAK001-200	RF CABLE		*
	15	AEM1038-090-E	EURO LABEL		*
	16	2832WH3EP-HSAE	S.DIAGRAM	ONLY ITALY	*

VICTOR COMPANY OF JAPAN, LIMITED
TELEVISION RECEIVER DIVISION 1106 Heta, Iwai-city, Ibaraki-prefecture, 306-0698, Japan

32WH3EP-CKD #4
28WH3EP-CKD #4

Printed in Japan
V.P. 9804
DP2052 HK.NN